

## Curriculum Vitae of *Ajith Abraham* Ph.D.

---

### CONTACT INFORMATION

**Work address:**

Machine Intelligence Research Labs (MIR Labs)  
Scientific Network for Innovation and Research Excellence  
P.O. Box 2259, Auburn, Washington 98071-2259, USA

Tel: 001-580-630-5791 (US) / 0044-7924747049 (UK) / 0091-9745513144 (India)  
001-253-2009372 (SMS) – Fax: 001-615-694-4607  
Personal Email: [ajith.abraham@ieee.org](mailto:ajith.abraham@ieee.org), [abraham.ajith@acm.org](mailto:abraham.ajith@acm.org)  
Personal WWW: <http://www.softcomputing.net>  
Profile: <http://www.researcherid.com/rid/A-1416-2008>

Information Technology for Innovations - EU Center of Excellence  
Faculty of Electrical Engineering and Computer science  
VSB-Technick Univerzita Ostrava  
17 listopadu 15/2172, 708 33 Ostrava-Poruba, Czech Republic  
Phone: +420 597 325 252 / Fax: +420 596 919 597

### EDUCATION

- Monash University, Melbourne, Australia  
Ph.D. in Computer Science, (2001)  
Thesis topic: *Hybrid Soft Computing: Architecture Optimization and Applications*
- Nanyang Technological University, Singapore  
Master of Science in Control and Automation (1998)  
Thesis topic: *Reliability Modeling and Optimization of Electronic Systems*
- University of Calicut, Kerala, India 673 635  
Bachelor of Technology in Electrical and Electronic Engineering (1990)  
Grade of Passing: First class (Honors). *First in the class of 50 students.*

### PROFESSIONAL EXPERIENCE SUMMARY

**Academic:** 13 years

**Industrial experience:** 7.5 years in three different assignments

### ACADEMIC TEACHING AND RESEARCH

*July 2008 -*

**Director**

Machine Intelligence Research Labs (MIR Labs)  
P.O. Box 2259, Auburn, Washington 98071-2259  
USA

*June 2009 -*

**Research Professor,**

Faculty of Electrical Engineering and Computer science  
*V?B-Technick univerzita Ostrava*  
17 listopadu 15/2172  
708 33 Ostrava-Poruba, Czech Republic

*January 2007 - 2010*

**Research Professor,**

*Norwegian Centre of Excellence*, Norwegian University of Science and Technology,  
O.S. Bragstads plass 2E, N-7491, Trondheim, Norway

*August 2004 - December 2006*

**Institute of Information Technology Advancement Program  
Distinguished Visiting Professor,**

School of Computer Science and Engineering, Chung-Ang University, Seoul, Korea  
School of Computer Science, Yonsei University, Seoul, South Korea

*August 2002 - July 2004*

**Assistant Professor,**

Department of Computer Science, Oklahoma State University, USA

*February 2002 - July 2002*

**Research Fellow,**

Faculty of Information Technology, Monash University (Clayton Campus), Australia

*March 1999 - January 2002*

**Lecturer,**

Faculty of Information Technology, Monash University, Australia

HONORARY/ADJUNCT APPOINTMENTS

*January 2011 - December 2015*

**Adjunct Professor,**

Southern Illinois University, Carbondale, USA

*November 2011 - November 2013*

**Adjunct Professor,**

University Technical Malaysia, Melaka

*June 2010 - June 2011*

**Adjunct Professor,**

Hungarian Academy of Sciences, Hungary

*January 2008 - December 2008*

**Adjunct Professor,**

Open University of Catalunya, Barcelona, Spain

*July 2008 - October 2008*

**Adjunct Professor,**

National Institute of Applied Sciences, INSA-Lyon, France

*May 2005 - April 2006*

**Adjunct Professor,**

Rovira i Virgili University, Spain

*January 2005 -*

**Adjunct Professor,**

Department of Computer Science and Engineering, Jinan University, China

*January 2005 -*

**Adjunct Professor,**

Department of Computer Science and Engineering, Dalian Maritime University, China

INDUSTRIAL EXPERIENCE

**Research and Development**

*January 1996 - February 1999*

**Project Engineer,**

Keppel Engineering Ltd., 19, Kian Teck Road, Singapore 628772.  
<http://www.keppelcorporation.com>

*April 1993 - October 1995*

**Design Engineer,**  
Hyundai Engineering Ltd., Seoul, Korea.  
<http://www.hyundai.com>

*March 1991 - February 1993*

**Engineer (Projects),**  
Ashok Leyland Ltd., Madras, India 600 057.  
<http://www.ashokleyland.com>

RESEARCH GRANTS AWARDED AS PRINCIPAL INVESTIGATOR

**Funding agency:** Generalitat de Catalunya, Spain  
**Topic:** Evolving Artificial Intelligence Paradigms on Computational Grid for Knowledge Mining  
**Principal Investigator:** *Ajith Abraham*  
**Funding period:** January - December 2008.

**Funding agency:** Ministry of Education, Spain  
**Topic:** Evolutionary Neural Network Optimization  
**Principal Investigator:** *Ajith Abraham*  
**Funding period:** 2005-2006.

**Funding agency:** Presidential Challenge Grant, Oklahoma State University  
**Topic:** Web Based Distributed Data Mining Using Hybrid Intelligent Systems  
**Principal Investigator:** *Ajith Abraham*  
**Co-Investigators:** D. Delen (OSU), M. Paprzycki (OSU) and J. Thomas (OSU)  
**Funding period:** 2003 - 2005.

**Funding agency:** Center of Excellence in Information Technology and Telecommunications, State of Oklahoma, USA  
**Topic:** Startup fund as Domain Leader  
**Principal Investigator:** *Ajith Abraham*  
**Funding period:** January - December 2004.

Table 1: Summary of contributed research publications

<b>Authored books</b>	5
<b>Journal papers</b>	205
<b>Book chapters</b>	71
<b>Edited books</b>	33
<b>Edited conference proceedings</b>	94
<b>Conference papers</b>	356
<b>Invited articles etc.</b>	36
Total	800

IEEE TECHNICAL COMMITTEE CHAIR

(November 2008 - ), **Co-Chair of the Technical Committee on Soft Computing**, IEEE Systems Man and Cybernetics Society, IEEE, USA.

IEEE COMPUTER SOCIETY - DISTINGUISHED VISITORS PROGRAM

(July 2011 - July 2013), **Distinguished Visitors Program - Representing Europe**, IEEE Computer Society, USA.

## MY RESEARCH INTERESTS

My primary research is on developing machine intelligence using natural computation techniques. Hybridization of different natural computation techniques is an innovative approach to construct computationally intelligent systems consisting of connectionist learning paradigms, fuzzy inference systems, approximate reasoning and derivative free optimization methods such as evolutionary computation, particle swarm optimization, bacterial foraging and so on. I am also interested in network security, sensor networks, information assurance, e-commerce, semantic Web, Web intelligence, bioinformatics, financial modeling, decision support systems, data mining applications etc. Please see **Table 1** for a summary of research publications.

## INVITED TALKS

### Keynote and Plenary Talks During International Conferences

1. Evolving Smart Information Systems: Challenges, Perspectives and Applications, Third International Conference on Trends in Information Sciences and Engineering (TISE 2011), Chennai, India, 2011.
2. ICT for Social Revolutions: Challenges, Perspectives and Applications, First Indo-Czech Synergy Programme on Advances in Information and Communication Technologies, Nagpur, India, August 2011.
3. Evolving Future Information Systems: Challenges, Perspectives and Applications, The 11th International Conference on Computational Science and Its Applications (ICCSA 2011), Santander, Spain, Springer Verlag, Germany, LNCS, 2011.
4. Quo-Vadis Hybrid Intelligent Systems: Architectures, Challenges and Applications, 7th International Conference on Hybrid Artificial Intelligent Systems (HAIS 2011), Springer Verlag, Germany, LNAI 6678, ISBN 978-3-642-21218, pp. 30, 2011.
5. Evolving Smart Information Systems: Role of Soft Computing, International Conference on Soft Computing Models in Industrial and Environmental Applications Salamanca, Spain, Springer Verlag, Germany, 2011.
6. Nature Inspired Meta-heuristics: Quo Vadis? Fourth International Conference on Genetic and Evolutionary Computing (ICGEC 2010), Shenzhen, China, IEEE, 2010.
7. Counter Terrorism: From Cyber to Real world - The Role of Machine Intelligence, 3rd International Conference on Computational Intelligence in Security for Information Systems (CISIS10), Leon, Spain, Springer Verlag, Germany, 2010.
8. Evolving Information Systems, Third International Conference on Emerging Trends in Engineering and Technology (ICETET-10), Goa, India, ISBN 978-0-7695-3884-6, IEEE, 2010.
9. Evolving Smart Information Systems, International Workshop on Meta-Heuristics and IT Researchers, IITM Gwalior, India, 2010.
10. Adaptive Data Structures for Modeling Hybrid Soft Computing Architectures, Fourth International Conference on Neural Parallel and Scientific Computation (NPSC 2010), Atlanta, USA, ISBN 1-890888-05-02, 2010.
11. Combating Terrorism: Soft Computing Technologies and Challenges, International Workshop on Soft Computing Models in Industrial Applications (SOC0 2010), Portugal, 2010.
12. Towards the Evolution of Smart Information Systems, International Conference and Workshop on Software Engineering and Intelligent Systems (SEIS 2010), Ota, Nigeria, 2010.
13. Engineering Hybrid Intelligent Systems: Architectures, Challenges and Perspectives, International Seminar on Intelligent Systems and Soft Computing, University of Granada, Spain, 2010.
14. Soft Computing and Terrorism Informatics: Technologies and Challenges, Soft Computing Techniques and Their Engineering Applications (SDP), Gwalior, India, 2010.
15. Combating Terrorism: Intelligent Technologies and Challenges, National Conference on Advanced Computing, Kochi, India, 2010.

16. Combating Terrorism: Technologies and Challenges, Terrorism and War: The Changing Relationship between Terrorism, Insurgency and Inter-State War (CSPTV 2010), St Andrews, UK, 2010
17. Soft Intrusion Detection, Prevention and Risk Assessment, Third International Conference on Pattern Recognition and Machine Intelligence (PReMI 2009), New Delhi, India.
18. Engineering Hybrid intelligent systems: From Architecture Design to Advanced Information Processing, IEEE International Conference on Information Science and Engineering (ICISE 2009), Nanjing, China.
19. Intrusion Detection, Prevention and Real Time Risk Assessment, Eighth International Conference on Mathematical and Computational Models (ICMCM 2009), Coimbatore, India , 2009.
20. Machine Intelligence to Network Intelligence, International Seminar on Machine Intelligence (ISMI 2009), Universitas Yarsi, Jakarta, Indonesia, 2009.
21. European Conference on Intelligence and Security Informatics (Euro ISI 2008), Esbjerg, Denmark, December 2008.
22. 2nd International Workshop on Evolutionary Techniques in Data-processing (DEXA'08/ETID '08), Turin, Italy, 2008.
23. IEEE International Conference on the Applications of Digital Information and Web Technologies (ICADIWT 2008), Ostrava, Czech Republic, 2008.
24. IEEE International Conference on Intelligence and Security Informatics (IEEE ISI 2008), Taipei, Taiwan, 2008.
25. International Conference on Emerging Trends in Engineering and Technology (ICETET 2008), Nagpur, India.
26. The 6th International Conference on Informatics and Systems (INFOS 2008), Cairo, Egypt, 2008.
27. International Symposium on Hybrid Soft Computing in Engineering, ICT and Social Science (HSC 2007), Sofitel Palm Resort, Johor Bahru, Malaysia, 2007.
28. Hybrid Artificial Intelligence Systems Workshop (HAIS 2007) in conjunction with The Conference of the Spanish Association for Artificial Intelligence (CAEPIA), Salamanca, Spain, 2007.
29. 6th International Conference on Computer Information Systems and Industrial Management Applications (CISIM 2007), Elk, Poland, 2007.
30. International Conference on Applied Computing (AC'07), Salamanca, Spain, 2007.
31. 1st IEEE International Conference on Digital Information Management, (ICDIM'06), Bangalore, India, 2006.
32. 8th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC'06), Timisoara, Romania, 2006.
33. First International Conference on Bio-Inspired Computing: Theory and Applications (BICTA'06), Wuhan, China, 2006.
34. The Third International Conference on Neural, Parallel and Scientific Computations (NPSC'06), Atlanta, USA, 2006.
35. ) International Conference on Applied Computing 2006 (AC'06), San Sebastian, Spain, 2006.
36. 7th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC'05), Timisoara, Romania, 2005.
37. International Conference on Applied Computing 2005 (AC'05), Algarve, Portugal, 2005.
38. 7th International Mendel Conference on Soft Computing (MENDEL'01), Brno, Czech Republic, 2001.

#### **Tutorials During International Conferences**

1. International Conference on Computer Modeling and Simulation, Brno, Czech Republic, September 2009.

2. International Conference on Computational Intelligence Communication System and Networks, CICSyN 2009, Indore, India, July 2009.
3. Third Asia International Conference on Modeling and Simulation, Bali, May 2009
4. International Conference on Emerging Trends in Engineering and Technology, ICETET 2008, Nagpur, India, July 2008.
5. The 6th International Conference on Informatics and Systems, INFOS 2008, Cairo, Egypt, March 2008.
6. Applied Computing, AC 2006, San Sebastian, Spain, February 2006.
7. Second International Conference on Hybrid Intelligent Systems, HIS 2002, Santiago, Chile, December 2002.
8. 6th Online World Conference on Soft Computing in Industrial Applications, WSC6, On the Internet, September 2001.
9. 15th European Simulation Multiconference, ESM 2001, Prague, June 2001.
10. International Conference on Intelligent Multimedia and Distance Education, ICIMADE'01, Fargo, USA, June 2001.
11. Second International Conference on Computers in Industry, ICCI 2000, Bahrain, November 2000.

#### **Invited Seminars**

1. University of Sfax, Tunisia (2011)
2. Chinese Academy of Sciences, China (2011)
3. G.H. Raison College of Engineering, Nagpur, India (2011)
4. Hungarian Academy of Sciences, Budapest, Hungary (2011)
5. Indian Institute of Technology, Roorkee, India (2011)
6. University of Delhi, India (2011)
7. Indian Institute of Information Technology and Management, Gwalior, India (2011)
8. Indian Institute of Information Technology and Management, Trivandrum, India (2011)
9. VSB Technical University - Ostrava, Czech Republic (2011)
10. University of Granada, Spain (2010)
11. Indian Institute of Information Technology and Management, Gwalior, India (2010)
12. Cochin University of Science and Technology, Cochin, India (2010)
13. Kuwait University, Kuwait (2010)
14. Covenant University, Ota, Nigeria (2010)
15. Universiti Teknikal Malaysia, Melaka, Malaysia (210)
16. Xidian University, Xian, China (2009)
17. Dalian Maritime University, Dalian, China (2009)
18. VSB Technical University - Ostrava, Czech Republic (2009)
19. Czech Academy of Sciences, Prague, Czech Republic (2009)
20. Universiti Teknologi Malaysia, Johor Bahru, Malaysia (2009)
21. Universiti Teknikal Malaysia, Melaka, Malaysia (2009)
22. G.H. Raison College of Engineering, Nagpur, India (2009)
23. National Institute of Applied Sciences, INSA Lyon, France (2008)
24. Arab Open University, Kuwait (2008)
25. Universiti Teknologi Malaysia, Johor Bahru, Malaysia (2007)
26. Universitat Politècnica de Catalunya, Barcelona, Spain (2007)

27. Open University of Catalonia Barcelona, Catalonia, Spain (2007)
28. Norwegian University of Science and Technology, Trondheim, Norway (2007)
29. Information and Communications University, Korea (2007)
30. National Kaohsiung University of Applied Sciences, Taiwan (2006)
31. Yonsei University, Seoul, Korea (2006)
32. University Babes-Bolyai (UBB), Cluj-Napoca, Romania (2006)
33. University of Burgos, Burgos, Spain (2006)
34. Rovira i Virgili University, Tarragona, Spain (2006)
35. National Kaohsiung University of Applied Sciences, Taiwan (2005)
36. Department of Computer Science, Chung-Ang University, Seoul, Korea (2005)
37. Jinan University, Shandong, China (2005)
38. Dalian University of Technology, Dalian, China (2005)
39. Dalian Maritime University, Dalian, China (2005)
40. Dalian Fisheries University, Dalian, China (2005)
41. Hanbat National University, Korea (2005)
42. University College Dublin, Ireland (2005)
43. James Cook University, Australia (2004)
44. New Mexico Tech, USA (2003)
45. University of South Australia, Adelaide, Australia (2001)
46. University of Calgary, Calgary, Canada (2001)
47. Deakin University, Melbourne, Australia (2000)

## TEACHING

### Subjects Taught

My teaching portfolio concentrates on past ten years during which I taught 14 subjects at graduate and under-graduate levels (Please see Table 2).

Table 2: Summary of Teaching Experience

<b>Subjects Taught</b>	<b>Level</b>	<b>Responsibility</b>
Computational Intelligence	Graduate	Instructor
Digital Logic Theory	Under graduate	Instructor
Fuzzy Sets, Fuzzy Logic and Fuzzy Inference Systems: Theory and Applications	Graduate	Instructor
Operating Systems	Graduate	Instructor
Intelligent Data Mining	Graduate	Instructor
Computer Science Migration	Graduate	Instructor
E-commerce	Under graduate	Instructor
Computer Architecture	Under graduate	Instructor
Artificial Intelligence I	Under graduate	Instructor
Artificial Intelligence II	Graduate	Instructor
Evolutionary and Neural Computing	Graduate	Instructor
Computer Models for Business Decisions	Graduate	Tutor
Project Management	Graduate & under graduate	Tutor
General Operations Management	Graduate & under graduate	Tutor

### **Ph.D. School**

1. *Intrusion Detection Systems* during the *European Future Generation Internet (EuroFGI)*, PhD course on Information and Communication Technologies Security Course, Norway (2007).
2. *Intrusion Detection and Prevention Systems* for a graduate course during September - October, 2007 held at Norwegian University of Science and Technology, Trondheim, Norway (2008).
3. *Hybrid Intelligent Systems* PhD course at University of Pisa, Italy (2011).
4. *Hybrid Intelligent Systems* PhD course at AGH University of Technology, Krakow, Poland (2011).
5. *Hybrid Computational Intelligence* PhD course at Wroclaw University of Technology, Wroclaw, Poland (2011).

### ACADEMIC ADVISING - COMPLETED RESEARCH STUDENTS

#### **Supervisor - Completed Research Students**

##### **Ph.D.**

1. Cong Tran (2005), University of South Australia, Australia
2. Swagatam Das (2009), Jadavpur University, India

##### **M.S.**

1. Saulat Farooq (2005), University of South Australia, Australia
2. Brent Doeksen (2003), Oklahoma State University, USA
3. Srilatha Chebrolu (2003), Oklahoma State University, USA
4. Sandhya Peddabachigari (2003), Oklahoma State University, USA
5. Tibebe Tesema, Addis Ababa University, Ethiopia

#### **Committee Involvement**

##### **Ph.D.**

1. Chet Langin, Southern Illinois University, Carbondale, USA
2. Roslina Binte Sallehuddin, Universiti Teknologi Malaysia, Malaysia
3. Pavel Kromer (2010), VSB-TU Ostrava, Czech Republic
4. Jan Platos (2010), VSB-TU Ostrava, Czech Republic
5. Eliska Ochodkova (2010), VSB-TU Ostrava, Czech Republic
6. Dante Tapia (2009), University of Salamanca, Spain
7. Santi Cabelle (2008), Open University of Catalonia, Spain

8. Mohammed El-Abd (2008), University of Waterloo, Canada
9. Jan Martinovic (2008), VSB-TU Ostrava, Czech Republic
10. Milos Kudelka (2008), VSB-TU Ostrava, Czech Republic
11. Xiaozhe Wang (2002), Monash University, Australia
12. Okkyung Choi (2004-2006), Chung Ang University, Seoul, Korea
13. Namoh Kang (2004-2006), Chung Ang University, Seoul, Korea
14. Srinivas Mukkamala (2003-2004), New Mexico Technology, USA

#### **M.S.**

- Pramesh Muppala (2003), Oklahoma State University, USA
- Miao Chong (2003), Oklahoma State University, USA
- Ruiyuan Guo (2003), Oklahoma State University, USA

#### **Thesis Examination - Ph.D.**

1. University Putra Malaysia, Malaysia
2. Nanyang Technological University, Singapore
3. Anna University, India
4. University of Waterloo, Canada
5. Indian Institute of Information Technology, Allahabad, India
6. Indian Institute of Information Technology and Management, Gwalior, India
7. University of Hyderabad, India
8. Indian Institute of Technology, Kharagpur, India
9. Indian Institute of Technology, Rourkee, India
10. Indian Institute of Technology, Kanpur, India
11. Birla Institute of Technology, India
12. Open University of Catalonia, Barcelona, Spain
13. Griffith University, Australia
14. Madurai Kamaraj University, India
15. University of Madras, India
16. Monash University, Australia
17. Rovira i Virgili University, Spain
18. Yonsei University, South Korea
19. Chung-Ang University, South Korea

#### **Thesis Examination - MS**

1. University of South Australia, Australia.
2. University of Pretoria, South Africa.
3. Nanyang Technological University, Singapore.

## Awards and Honors

### Outstanding Faculty Award

Was awarded the outstanding faculty award (Research) by the Department of Computer Science, Oklahoma State University, USA in 2003.

### Best Paper Awards and Nominations

1. Best technical paper award of ICIC 2000, Second International conference on Computers in Industry, Bahrain, November 13-15, 2000. The best paper was selected from a total of 45 papers (52 % acceptance). The award includes US\$1000 and a certificate of merit. **Paper details:** Ajith Abraham , *A Soft Computing Approach for Fault Prediction of Electronic Systems, Published by The Bahrain Society of Engineers, Majeed A Karim et al. (Eds.), Bahrain, pp. 83-91, 2000.*
2. Best technical paper of the Biological Simulation Track, 15th European Simulation Conference, Prague, Czech Republic, 06-09 June 2001. **Paper details:** Ajith Abraham , *Ninan Sajith and Babu Joseph, Will We Have a Wet Summer? Long-term Rain Forecasting Using Soft Computing Models, Modelling and Simulation 2001, Publication of the Society for Computer Simulation International, Prague, Czech Republic, Kerckhoffs E.J.H. and Snorek M. (Eds.), ISBN 1565552253, pp. 1044-1048, 2001.*
3. Best technical paper of CASYS 2001, Fifth International Conference on Computing Anticipatory Systems, Liege, Belgium, 13-18 August 2001. **Paper details:** *Sonja Petrovic-Lazerevic, Ken Coghill and Ajith Abraham , Neuro-Fuzzy Support of Knowledge Management in Social Regulation, Computing Anticipatory Systems, Dubois D.M.(Ed.), American Institute of Physics, New York, ISBN 0735400814, pp. 387-400, 2002.*
4. Best paper award nomination of IEA/AIE'04, 17th International Conference on Industrial Engineering Applications of Artificial Intelligence and Expert Systems, Canada, 2004. **Paper details:** *Marcin Paprzycki, Ajith Abraham and Ruiyuan Guo, Data Mining Approach for Analyzing Call Center Performance, Innovations in Applied Artificial Intelligence, Robert Orchard, Chunsheng Yang, Moonis Ali (Eds.), Lecture Notes in Computer Science 3029, Springer Verlag, Germany, pp. 1092-1101, 2004.*
5. Best technical paper of the Sixth International Conference on Intelligent Systems Design and Applications, ISDA'06, Jinan, China, 2006. Three best papers were selected by an award committee from a total of 490 accepted papers (27 % acceptance). **Paper details:** *Swagatam Das, Ajith Abraham and Amit Konar, Spatial Information based Image Segmentation Using a Modified Particle Swarm Optimization Algorithm, IEEE CS Press, ISBN 07695- 2528-8, Volume II, pp. 438-444, 2006.*
6. Best technical paper of the Second IEEE International Conference on Digital Information Management, Lyon, France, ICDIM 2007. Best paper was selected by a panel/committee from a total of 83 accepted papers (37.9% acceptance rate). **Paper details:** *Crina Grosan and Ajith Abraham , Exploration of Multiple Roots for a Polynomial System, IEEE Press, USA, ISBN 1-4244-1476-8, pp. 133-137, 2007.*
7. Best technical paper of the 7th International Conference on Computer Information Systems and Industrial Management Applications (CISIM'08), Ostrava, Czech Republic. Best Paper was selected by a panel from a total of 60 accepted papers. **paper details:** *Divyata Dal, Siby Abraham, Ajith Abraham , Sugata Sanyal and Mukund Sanglikar, Evolution induced Secondary Immunity: An Artificial Immune System based Intrusion Detection System, IEEE Computer Society press, USA, ISBN 978-0-7695-3184-7, pp. 61-66, 2008.*

### Academic Service Awards

Track Chair of Information and Assurance Track, IEEE International Conference on Information Technology: Coding and Computing (ITCC'04), USA.

### Industrial Awards

Engineer of the Project Award, Hyundai Engineering and Construction Company Ltd, Seoul, Korea. The award citation reads '*. . . for exemplary conduct and best performance demonstrated in his dutiful and faithful commitment to his job*'.

#### **Award Nominations and Others**

1. Listed in the First edition of Who's Who of Emerging Leaders, Marquis Who's Who, USA, 2007.
2. Listed in the 61st Edition of Who's Who in America, Marquis Who's Who, USA, 2007.
3. Listed in the 23rd Edition of Who's Who in the World, Marquis Who's Who, USA, 2006, 2007, 2008, 2009, 2010.
4. Listed in the 7th Edition of Who's Who in Science and Engineering, Marquis Who's Who, USA, 2003.
5. Living Legends, International Biographical Centre, Cambridge CB2 3QP, England, UK, 2004.
6. The Worldwide Honours List, International Biographical Centre, Cambridge CB2 3QP, England, UK, 2003.
7. 2000 Outstanding Intellectuals of the 21st Century Order of Excellence, International Biographical Centre, Cambridge CB2 3QP, England, UK, 2003.
8. 2000 Outstanding Scientists of the 21st Century International Biographical Centre, Cambridge CB2 3QP, England, UK, 2003.
9. Honorary Member of Research Board of Advisors, The American Biographical Institute Inc., 2001.

#### **JOURNAL EDITOR**

##### **Editorial Board Memberships in International Journals**

1. Founding Co-Editor in Chief and Guest Editor of 1 Special Issue, The International Journal of Hybrid Intelligent Systems (IJHIS), IOS Press, The Netherlands.
2. Founding Editor in Chief, International Journal of Computational Intelligence Research (IJ-CIR), Spain (2004-2008)
3. Founding Editor in Chief, Journal of Information Assurance and Security (JIAS), USA.
4. Editor in Chief, International Journal of Grid and Utility Computing, Inderscience Publishers, Switzerland (2008-2010)
5. Editor in Chief and Guest Editor of 1 Special Issue, International Journal of Autonomic Computing, Inderscience Publishers, Switzerland (2008-2010)
6. Co- Editor in Chief and Guest Editor of 1 Special Issue, International Journal of Computational Intelligence in Bioinformatics and Systems Biology, Inderscience Publishers, Switzerland
7. Editorial Advisory Board, Guest Editor of 1 Special issue, International Journal of Intelligent and Fuzzy Systems, IOS Press, Netherlands
8. Advisory Editor and and Guest Editor of 1 Special Issue, International Journal of Reasoning Based Intelligent Systems, Inder science Publishers, Geneve, Switzerland.
9. Associate Editor, Knowledge and Information Systems, Springer Verlag, Germany
10. Associate Editor, Social Network Analysis and Mining, Springer Verlag, Germany
11. Associate Editor and Guest Editor for 2 Special issues, Neurocomputing, Elsevier Science, The Netherlands
12. Associate Editor, International Journal of Web Services Practices, Seoul, Korea
13. Associate Editor, Advances in Fuzzy Systems, Hindawi Corporation, USA.
14. Associate Editor, International Journal of Biometrics, Inderscience Publishers, Switzerland
15. Associate Editor and Guest Editor for 1 Special Issue, ACM Transactions on Autonomous and Adaptive Systems (TAAS), ACM Press, USA
16. Guest Editor for 1 Special Issue, Fundamenta Informaticae, IOS Press, Netherlands

17. Guest Editor for 2 Special Issues, Information Sciences, Elsevier Science, The Netherlands
18. Guest Editor for 2 Special Issues, International Journal of Neural Computing Applications, Springer Verlag London Ltd., UK
19. Guest Editor for 1 Special Issue, Journal of Fuzzy Optimization and Decision Making, Springer, USA
20. Guest Editor for 2 Special Issues, Journal of Network and Computer Applications, Elsevier Science, The Netherlands.
21. Guest Editor for 1 Special Issue, Informatica: An International Journal of Computing and Informatics, Slovenia
22. Guest Editor for 1 Special Issue, International Journal of Simulation Systems, Science Technology, UK
23. Guest Editor for 1 Special Issue, Journal of Advanced Computational Intelligence and Intelligent Informatics (JACIII), Fuji Press, Japan
24. Guest Editor for 1 Special Issue, International Journal of Image Processing and Communications, ISSN 1425-140X, Poland.
25. Guest Editor for 2 Special Issues, Soft Computing: Soft Computing, Springer Verlag, Germany.
26. Editor and Guest Editor for 2 Special Issues, International Journal on Neural and Mass-Parallel Computing and Information Systems - Neural Network World, Czech Republic.
27. Guest Editor for 1 Special Issue, Multiagent and Grid Systems - An International Journal, IOS Press, The Netherlands
28. Editor and Guest Editor for 1 Special Issue, Journal of Information and Knowledge Management (JIKM), World Scientific, Singapore
29. Editor and Guest Editor for 1 special issue, International Journal of Computational Intelligence and Applications (IJCIA), World Scientific, Singapore
30. Editor and Guest Editor for 2 Special Issues, Journal of Universal Computer Science (J.UCS), Know-Center, Graz, Austria
31. Editor, International Journal of Network Security, Journal of Science Publications, Taiwan
32. Editor and Guest Editor for 3 Special issues, International Journal of Neural Parallel and Scientific Computations (NPSC), Dynamic Publishers Inc. USA
33. Editor and Guest Editor for 1 Special Issue, International Journal of Innovative Computing and Applications, Inderscience Publishers, Switzerland.
34. Editor, International Journal of Power and Energy Conversion, Inderscience Publishers, Switzerland.
35. Editor, IADIS International Journal of Computer Science and Information Systems, Portugal (2007-2009)
36. Editor, International Journal of Soft Computing and Bioinformatics, India (2007-2009)
37. Editor, International Journal of Computational Intelligence: Theory and Practice, India (2007-2009)
38. Editor, International Journal of Medical Sciences and Technology, India (2007-2009)
39. Editor, International Journal of Life Sciences and Technology (IJLST), India (2007-2009)
40. Editor, International Journal of BioSciences and Technology, India (2007-2009)
41. Associate Editor, Guest Editor for 3 Special issues, Journal of Digital Information Management (JDIM), Digital Information Research Foundation, India (2006-2009)
42. Associate Editor, International Journal of Systems Science (IJSS), Taylor Francis, UK (2003-2005)
43. International Advisory Board, International Journal of Software Resuse, California, USA (2007-2009)

44. International Advisory Board, International Journal of Thinking Objectively, California, USA (2007-2009)
45. International Advisory Board, International Journal of Unified Software Engines, California, USA (2007-2009)
46. International Domain Expert, International Journal of Patterns, California, USA (2007-2009)
47. Editor, International Journal of Software Architecture, California, USA (2007-2009)
48. Editor, Advances in Management, India (2007-2008)
49. Editor, International Journal of Theoretical and Applied Computer Sciences (IJTACS), India (2007-2008)
50. Editor, Journal of Educational Technology, i-Manager Publications, India (2004-2006)
51. Editor, Journal of Engineering and Technology, i-Manager Publications, India (2004-2006)
52. Consulting Editor, International Journal of Computational Intelligence in Bioinformatics, India (2006-2007)
53. Consulting Editor, Journal of Advances in Computational Sciences and Technology (ACST), ISSN 0973-6107, India (2006-2007).

#### CONTRIBUTED RESEARCH PUBLICATIONS

#### PUBLISHED BOOKS

##### Authored Books

1. *Ajith Abraham* and Yasuhiko Dote, **Engineering Hybrid Intelligent Systems: Architectures and Perspectives**, Studies in Fuzziness and Soft Computing, Springer Verlag, Germany, ISBN 3-540-25058-1, 2012.
2. Crina Grosan and *Ajith Abraham*, **Computational Intelligence: A Crash Course** Intelligent Systems Reference Library Series, Springer Verlag, Germany, ISBN 978-3-642-21003-7, 450 pages, 2011.
3. Huihui Bai, Anhong Wang, Yao Zhao, Jeng-Shyang Pan and *Ajith Abraham*, Distributed Multiple Description Coding: Principles Algorithms and Systems, Springer Verlag, London, ISBN 978-1-4471-2247-0, 171 p. 108 illus., 2011.
4. Yuehui Chen and *Ajith Abraham*, **Tree-Structure based Hybrid Computational Intelligence: Theoretical Foundations and Applications**, Intelligent Systems Reference Library Series, Springer Verlag, Germany, ISBN: 978-3-642-04738-1, 2009.
5. Swagatam Das, *Ajith Abraham* and Amit Konar, **Metaheuristic Clustering**, Studies in Computational Intelligence, Springer Verlag, Germany, Volume 178, ISBN: 978-3-540-92172-1, 2009 (Foreword by Dr. Witold Pedrycz).

##### Edited Books

1. *Ajith Abraham*, Computational Social Networks: Tools, Perspectives and Applications, Series in Computer Communications and Networks, Springer Verlag, London, 2012.
2. *Ajith Abraham*, Computational Social Networks: Security and Privacy, Series in Computer Communications and Networks, Springer Verlag, London, 2012.
3. *Ajith Abraham*, Computational Social Networks: Mining and Visualization, Series in Computer Communications and Networks, Springer Verlag, London, 2012.
4. Mario Kppen, Gerald Schaefer and *Ajith Abraham*, Intelligent Computational Optimization in Engineering: Techniques and Applications, Studies in Computational Intelligence, Springer Verlag, Germany, ISBN 978-3-642-21704-3, 408 p., 2011.
5. *Ajith Abraham*, Aboul-Ella Hassanien and Vaclav Snasel, **Computational Social Networks: Tools, perspectives and Analysis**, Springer Verlag, London, ISBN: 978-1-84882-228-3, 2010.

6. Santi Caballe, Fatos Xhafa and *Ajith Abraham* , Intelligent Networking, Collaborative Systems and Applications, Studies in Computational Intelligence, Springer Verlag, Germany, ISBN 978-3-642-16792-8, 310 p., 2010
7. Bijaya Panigrahi, *Ajith Abraham* and Swagatam Das, Computational Intelligence in Power Systems, Studies in Computational Intelligence, Springer Verlag, Germany, ISBN: 978-3-642-14012-9, 400 p., 2010.
8. Fatos Xhafa, Santi Caballe, *Ajith Abraham* , Thanasis Daradoumis and Angel Juan, **Computational Intelligence for Technology-Enhanced Learning**, Studies in Computational Intelligence, Springer Verlag, Germany, ISBN: 978-3-642-11223-2, 250 p., 2010.
9. Richard Chbeir, Youakim Badr, *Ajith Abraham* and Aboul-Ella Hassanien, **Emergent Web Intelligence: Advanced Semantic Technologies**, Springer Verlag, London, ISBN: 978-1-84996-073-1, 496 p., 2010.
10. Youakim Badr, Richard Chbeir, *Ajith Abraham* and Aboul-Ella Hassanien, **Emergent Web Intelligence: Advanced Information Retrieval**, Springer Verlag, London, ISBN: 978-1-84996-076-2, 544 p. 178 illustrations, 2010..
11. Aboul-Ella Hassanien, *Ajith Abraham* , Athanasios Vasilakos, Witold Pedrycz, **Foundations of Computational Intelligence Volume 1: Learning and Approximation**, Studies in Computational Intelligence, Springer Verlag, Germany, ISBN: 978-3-642-01081-1, pp. 300, 2009.
12. Aboul-Ella Hassanien, *Ajith Abraham* , Francisco Herrera, **Foundations of Computational Intelligence Volume 2: Approximate Reasoning**, Studies in Computational Intelligence, Springer Verlag, Germany, ISBN: 978-3-642-01532-8, pp. 300, 2009.
13. *Ajith Abraham* , Aboul-Ella Hassanien, Patrick Siarry and Andries Engelbrecht, **Foundations of Computational Intelligence Volume 3: Global Optimization**, Studies in Computational Intelligence, Springer Verlag, Germany, ISBN: 978-3-642-01084-2, pp. 300, 2009.
14. *Ajith Abraham* , Aboul-Ella Hassanien and Andre Carvalho, **Foundations of Computational Intelligence Volume 4: Bio-Inspired Data Mining**, Studies in Computational Intelligence, Springer Verlag, Germany, ISBN: 978-3-642-01087-3, pp. 300, 2009.
15. Aboul-Ella Hassanien, *Ajith Abraham* and Vaclav Snasel, **Foundations of Computational Intelligence Volume 5: Function Approximation and Classification**, Studies in Computational Intelligence, Springer Verlag, Germany, ISBN: 978-3-642-01535-9, pp. 300, 2009.
16. *Ajith Abraham* , Aboul-Ella Hassanien, Andre Carvalho and Vaclav Snasel, **Foundations of Computational Intelligence Volume 6: Data Mining**, Studies in Computational Intelligence, Springer Verlag, Germany, ISBN: 978-3-642-01090-3, pp. 300, 2009.
17. Aboul-Ella Hassanien, Jemal Abawajy, *Ajith Abraham* , Hani Hagraas, **Pervasive Computing : Innovations in Intelligent Multimedia and Applications**, Series in Computer Communications and Networks, Springer Verlag, Germany, ISBN 978-1-84882-598-7, 2009.
18. *Ajith Abraham* , Rafael Falcon and Rafael Bello, **Rough Set Theory: A True Landmark in Data Analysis**, Studies in Computational Intelligence, Springer Verlag, Germany, ISBN 978-3-540-89920-4, 325 pages, 2008.
19. Fatos Xhafa and *Ajith Abraham* , **Metaheuristics for Scheduling: Distributed Computing Environments**, Studies in Computational Intelligence, Springer Verlag, Germany, ISBN: 978-3-540-69260-7, 380 pages, 2008.
20. Fatos Xhafa and *Ajith Abraham* , **Metaheuristics for Scheduling: Industrial and Manufacturing Applications**, Studies in Computational Intelligence, Springer Verlag, Germany, ISBN: 978-3-540-78984-0, 345 pages, 2008.
21. *Ajith Abraham* , Crina Grosan, Witold Pedrycz, **Engineering Evolutionary Intelligent Systems**, Studies in Computational Intelligence, Springer Verlag, Germany, ISBN 978-3-540-75395-7, 400 pages, 2008.
22. Arpad Kelemen, *Ajith Abraham* and Yuehui Chen, **Computational Intelligence in Bioinformatics**, Studies in Computational Intelligence, Springer Verlag, Germany, ISBN: 978-3-540-76802-9, 330 pages, 2008.

23. Aboul-Ella Hassanien, *Ajith Abraham* and Janusz Kacprzyk, **Computational Intelligence in Multimedia Processing**, Studies in Computational Intelligence, Springer Verlag, Germany, ISBN: 978-3-540-76826-5, 400 pages, 2008.
24. Arpad Kelemen, *Ajith Abraham* and Yulan Liang, **Computational Intelligence in Medical Informatics**, Studies in Computational Intelligence, Springer Verlag, Germany, ISBN: 978-3-540-75766-5, 390 pages, 2008.
25. Crina Grosan, *Ajith Abraham* , Hisao Ishibuchi, **Hybrid Evolutionary Algorithms**, Studies in Computational Intelligence, Vol. 75, Springer Verlag, Germany, ISBN 978-3-540-73296-9, 405 pages, 2007.
26. Nadia Nedjah, *Ajith Abraham* , Luiza de Macedo Mourelle, **Computational Intelligence in Information Assurance and Security**, Studies in Computational Intelligence, Volume 57, Springer Verlag, Germany, ISBN-10 3-540-71077-9, 2007.
27. *Ajith Abraham* , Crina Grosan and Vitorino Ramos, **Swarm Intelligence and Data Mining**, Studies in Computational Intelligence, Springer Verlag, Germany, pages 270, ISBN: 3-540-34955-3, 2006 (Foreword by James Kennedy).
28. *Ajith Abraham* , Crina Grosan and Vitorino Ramos, **Stigmergic Optimization**, Studies in Computational Intelligence, Springer Verlag, Germany, pages 300, ISBN: 3-540-34689-9, 2006.
29. Nadia Nedjah, *Ajith Abraham* and Luiza de Macedo Mourelle, **Genetic Systems Programming**, Studies in Computational Intelligence, Springer Verlag Germany, ISBN: 3-540- 29849-5, pages 250, 2006 (Foreword by Dr. John Koza).
30. *Ajith Abraham* , Lakhmi Jain and Robert Goldberg, **Evolutionary Multiobjective Optimization: Theoretical Advances and Applications**, Springer Verlag, London , ISBN 1852337877, 12 Chapters, 315 pages, 2005.
31. *Ajith Abraham* , Lakhmi Jain and Berend Jan van der Zwaag, **Innovations in Intelligent Systems: Design, Management and Applications**, Studies in Fuzziness and Soft Computing, Springer Verlag Germany, ISBN: 354020265X, 18 Chapters, 470 pages, 2004 (Foreword by Dr. Clarence de Silva).
32. Ravi Jain, *Ajith Abraham* , Colette Faucher and Berend Jan van der Zwaag, **Innovations in Knowledge Engineering**, Advanced Knowledge International, Australia, 12 Chapters, ISBN 097500408, 351 pages, 2003 (Foreword by Dr. Jim Austin).
33. *Ajith Abraham* , Lakhmi Jain and Janusz Kacprzyk, **Recent Advances in Intelligent Paradigms and Applications**, Studies in Fuzziness and Soft Computing, Springer Verlag Germany, ISBN 3790815381, 12 Chapters, 272 pages, 2002 (Foreword by Dr. Ronald Yager).

#### JOURNAL PUBLICATIONS

##### Peer Reviewed Articles Published (or in press) in International Journals

1. Salha Alzahrani, Naomie Salim and *Ajith Abraham* , Understanding Plagiarism Linguistic Patterns, Textual Features and Detection Methods, IEEE Transactions on Systems Man and Cybernetics: Applications and Reviews, IEEE, USA, 2012.
2. Leida Li, Shushang Li, *Ajith Abraham* and Jeng-Shyang Pan, Geometrically Invariant Image Watermarking Using Polar Harmonic Transforms, Information Sciences, Elsevier Sciences, Netherlands, 2012.
3. Hala Own and *Ajith Abraham* , A New Weighted Rough Set Framework Based Classification for Egyptian Neonatal Jaundice, Applied Soft Computing, Elsevier Sciences, Netherlands, 2012.
4. Salha Alzahrani, Vasile Palade, Naomie Salim and *Ajith Abraham* , Using Structural Information and Citation Evidence to Detect Significant Plagiarism Cases in Scientific Publications, Journal of the American Society for Information Science and Technology, John Wiley, USA, 2012.
5. Kun Ma, Bo Yang, Zhenxiang Chen, *Ajith Abraham* and Haiyang Wang, A Model Transformation Approach based on Executable Business Model, Journal of Universal Computer Science, Austria, 2012.

6. Musrrat Ali, Millie Pant and *Ajith Abraham* , Improving Differential Evolution Algorithm by Synergizing Different Improvement Mechanisms, ACM Transactions on Autonomous and Adaptive Systems, ACM Press, USA, 2011.
7. Crina Grosan, *Ajith Abraham* and Vaclav Snasel, Solving Polynomial Systems Using a Modified Line Search Approach, International Journal of Innovative Computing, Information and Control, Volume 7, 2011.
8. Vaclav Snasel, *Ajith Abraham* , Jan Martinovic, Pavla Drazdilova, Katerina Slaninova, Thanasis Daradoumis and Fatos Khafa, A layered framework for evaluating on-line collaborative learning interactions, Journal of Computational and Theoretical Nanoscience, USA, 2011.
9. *Ajith Abraham* , Ravi Kumar Jatoth, Anguluri Rajasekhar, Hybrid Differential Artificial Bee Colony Algorithm, Journal of Computational and Theoretical Nanoscience, USA, 2011.
10. Radha Thangaraj, Millie Pant, *Ajith Abraham* and Vaclav Snasel, Modified Particle Swarm Optimization with Time Varying Velocity Vector, International Journal of Innovative Computing, Information and Control, Volume 7, 2011.
11. Hongbo Liu, *Ajith Abraham* , Weishi Zhang and Sean Mcloone, A Swarm-based Rough Set Approach for fMRI Data Analysis, International Journal of Innovative Computing, Information and Control, Volume 7, 2011.
12. Lin Wang, Bo Yang, Yuehui Chen, *Ajith Abraham* , Hongwei Sun, Zhenxiang Chen, Haiyang Wang, Improvement of Neural Network Classifier Using Floating Centroids, Knowledge and Information Systems Journal, Springer Verlag, Germany, 2011.
13. Sayan Ghosh, Swagatam Das, Kaushik Suresh, Debarati Kundu and *Ajith Abraham* , Interparticle Communication and Dynamics of the lbest particle swarm optimizer: An analytical view, Information Sciences, Elsevier Science, Netherlands, 2011.
14. Sara Rodræiguez, Dante Tapia, Juan De Paz, Juan Corchado, Javier Bajo, *Ajith Abraham* , Self Organizing Multi-Agent System for Management and Planning Surveillance Routes, Computing and Informatics, Slovakia, 2011.
15. Jinhui Zhao, Ning Wang, Shipin Yang, Jie Fu and *Ajith Abraham* , A Bio-inspired Algorithm Based on Membrane Computing, Journal of Intelligent Systems, John Wiley, USA, 2011.
16. Jos Manuel Bentez , Sabrina Senatore and *Ajith Abraham* , Intelligent Systems, Design and Applications, Soft Computing: Soft Computing - A Fusion of Foundations, Methodologies and Applications, Springer Verlag, Germany, Volume 15, 2011.
17. Musrrat Ali, Millie Pant and *Ajith Abraham* , A Simplex Differential Evolution Algorithm: Development and Applications, Transactions of the Institute of Measurement and Control, Sage Publications UK, 2011.
18. Samrat Sabat, Siba Udgata, Leandro Santos Coelho and *Ajith Abraham* , Dispersed Harmony Search Algorithm for MESFET DC and Small Signal Model parameter Extraction, International Journal of Innovative Computing, Information and Control, Volume 6, 2011.
19. Hongbo Liu, *Ajith Abraham* , Vaclav Snasel and Sean Mcloone, Particle Swarm Scheduling for Work-Flow Applications in Distributed Data-Intensive Computing Environments, Information Sciences, Elsevier Science, Netherlands, 2011.
20. Radha Thangaraj, Millie Pant and *Ajith Abraham* , Modified Differential Evolution Algorithm with Laplace Mutation, International Journal of Innovative Computing, Information and Control, Volume 7, 2011.
21. Radha Thangaraj, Thangaraj Chelliah, Millie Pant, *Ajith Abraham* and Crina Grosan, Optimal Gain-Tuning of PI Speed Controller in Induction Motor Drives Using Particle Swarm Optimization, The Logic Journal, Oxford University Press, UK, 2011.
22. Emilio Corchado, *Ajith Abraham* and Andre de Carvalho, Nature Inspired Ambient intelligence, Information Sciences, Elsevier Science, Netherlands, 2011.
23. Radha Thangaraj, Millie Pant, Pascal Bouvry and *Ajith Abraham* , Solving Stochastic Programming Problems using Modified Differential Evolution Algorithms, The Logic Journal, Oxford University Press, UK, 2011.

24. Milos Kudelka, Zdenek Horak, Vaclav Snasel, Pavel Kromer and *Ajith Abraham* , Social and Swarm Aspects of Co-authorship Network, The Logic Journal, Oxford University Press, UK, 2011.
25. Mrutyunjaya Panda, *Ajith Abraham* , Swagatam Das, Manas Ranjan Patra, Network intrusion detection system: A machine learning approach, Intelligent Decision Technologies, Volume 5, Issue 4, pp. 347-356, 2011.
26. Ashraf Darwish and *Ajith Abraham* , The Use of Computational Intelligence in Digital Watermarking: Review, Challenges, and New Trends, Neural Network World, Volume 21, Issue 4, pp. 277-297, 2011.
27. Rajasekhar Anguluri, *Ajith Abraham* and Vaclav Snasel, A Hybrid Bacterial Foraging - PSO Algorithm Based Tuning of Optimal FOPI Speed Controller, Acta Montanistica Slovaca Rocnk , Volume 16, Issue 1, pp. 55-65, 2011.
28. Sarina Sulaiman, Siti Mariyam Shamsuddin, *Ajith Abraham* , Shahida Sulaiman, Intelligent Web Caching Using Machine Learning Methods, Neural Network World, Volume , Issue 5, pp. 429-452, 2011.
29. S. Roy, S. Minhazul Islam, S. Ghosh, and S. Das and *Ajith Abraham* , An Adaptive Differential Evolution Algorithm For Autonomous Deployment and Localization of Sensor Nodes, Progress In Electromagnetics Research B, Vol. 29, pp. 289-309, 2011.
30. Millie Pant, Radha Thangaraj and *Ajith Abraham* , Differential Evolution- Particle Swarm Optimization Algorithm: A New hybrid Meta-heuristic for solving global optimization problems, International Journal of New Mathematics and Natural Computation, World Scientific Publishing company, Singapore, Volume 7, No. 3, pp. 363-381, 2011.
31. Leida Li, Jianying Zhang and *Ajith Abraham* , Image Watermarking Based on Invariant Representation of Polar Sine Transform, IEICE TRANSACTIONS on Fundamentals of Electronics, Communications and Computer Sciences, Volume E94-A, No.10, pp.2048-2052, 2011.
32. Musrrat Ali, Millie Pant, *Ajith Abraham* and Vaclav Snasel, Differential Evolution Using Mixed Strategies in Competitive Environment, International Journal of Innovative Computing, Information and Control, Volume 7, No.8, pp. 5063-5084, 2011.
33. Mong-Fong Horng, Jie Liu, *Ajith Abraham* and Jeng-Shyang Pan, Hybrid Intelligent Systems, International Journal of Innovative Computing, Information and Control, Volume 7, No. 6, pp. 3033-3034, 2011.
34. Liang Huang, Il Hong Suh, *Ajith Abraham* , Dynamic Multi-objective Optimization Based on Membrane Computing is Applied to Control of Time-varying Unstable Plants, Information Sciences, Elsevier Science, Netherlands, Volume 181, Issue 11, pp. 2370-2391, 2011.
35. Musrrat Ali, Millie Pant and *Ajith Abraham* , Improved differential evolution algorithm with decentralisation of population, International Journal of Bio-Inspired Computation, Volume 3, Number 1, pp. 17-30, 2011.
36. Radha Thangaraj, Millie Pant, *Ajith Abraham* and Pascal Bouvry, Particle Swarm Optimization: Hybridization Perspectives and Experimental Illustrations, Applied Maths and Computation, Elsevier Science, Netherlands, Volume 217, No. 1, pp. 5208-5226, 2011.
37. *Ajith Abraham* , Hongbo Liu and Aboul Ella Hassainen, Neighbor Selection in Peer-to-Peer Overlay Networks: A Swarm Intelligence Approach, Telecommunication Systems: Modelling, Analysis, Design and Management, Springer Verlag, Germany, Volume 46, No. 3, pp. 195-208, 2011.
38. Crina Grosan, *Ajith Abraham* and Aboul Ella Hassainen, A Line Search Approach for High Dimensional Function Optimization, Telecommunication Systems: Modelling, Analysis, Design and Management, Springer Verlag, Germany, Volume 46, No. 3, pp. 217-243, 2011.
39. Hongbo Liu, *Ajith Abraham* , Wei Wang, A Biologically Inspired Computational Model of Language Cognition, Computer Society of India Communications, Volume 35, Issue 2, pp. 26-27, 2011.
40. Fatos Xhafa, *Ajith Abraham* , Nature Inspired Schedulers in Computational Grids, Computer Society of India Communications, Volume 35, Issue 2, pp. 28-30, 2011.

41. Prithwish Chakraborty, Swagatam Das, Gourab Ghosh Roy and *Ajith Abraham* , On Convergence of the Multi-objective Particle Swarm Optimizers, Information Sciences, Elsevier Science, Netherlands, Volume 181, Issue 8, pp. 1411-1425, 2011.
42. Swagatam Das, Arpan Mukhopadhyay, Anwit Roy, *Ajith Abraham* and Bijaya Panigrahi, Exploratory Power of the Harmony Search Algorithm: Analysis and Improvements for Global Numerical Optimization, IEEE Transactions on Systems Man and Cybernetics - Part B, IEEE Press, USA, Volume 41, Issue 1, pp. 89-106, 2011.
43. Tribeni Prasad Banerjee, Amit Konar, Swagatam Das and *Ajith Abraham* , An Intelligent Lossless Data Compressor Implementation using Reconfigurable Hardware, Journal of Information Hiding and Multimedia Signal Processing, Volume 2, No. 1, pp. 41-50, 2011.
44. Hesam Izakian and *Ajith Abraham* , Fuzzy C-Means and Fuzzy Swarm for Fuzzy Clustering Problem, Expert Systems with Applications, Elsevier Science, Netherlands, Volume 33, Issue 3, pp. 1835-1838, 2011.
45. Yuehui Chen, Bin Yang, Qingfang Meng, Yaou Zhao and *Ajith Abraham* , Time-series Forecasting using a System of Ordinary Differential Equations, Information Sciences, Elsevier Science, Netherlands, Volume 181, Issue 1, pp. 106-114, 2011.
46. Emilio Corchado, Juan Corchado and *Ajith Abraham* , Hybrid Intelligence for Bio-Medical Informatics, International Journal of Computational Intelligence in Bioinformatics and Systems Biology (IJCIBSB), Inderscience Publishers, Switzerland, Volume 1, Issue 4, pp. 347-348, 2010.
47. *Ajith Abraham* , Nature Inspired Machine Intelligence, Computer Society of India Communications, Volume 34, Issue 9, pp. 4-9, 2010.
48. Vaclav Snasel, Jan Platos, Pavel Kromer, *Ajith Abraham* , Nabil Ouddane and Dusan Husek, Interleaver Optimization Using Population Based Metaheuristics, Neural Network World, Volume 20, No. 5, pp. 591-608, 2010.
49. Dante Tapia, *Ajith Abraham* , Juan Corchado and Ricardo Alonso, Agents and Ambient Intelligence: Case Studies, Journal of Ambient Intelligence and Humanized Computing (AIHC), Springer Verlag, Germany, Volume 1, Number 2, pp. 85-93, 2010.
50. Juan Fraile, Javier Bajo, Juan Corchado, *Ajith Abraham* , Applying wearable solutions in dependent environments, IEEE Transactions on Information Technology in Biomedicine, IEEE Press, Volume 14, Issue 6, pp. 1459-67, 2010.
51. Tom Novosad, Vaclav Snasel, *Ajith Abraham* and Jack Yang, Searching Protein 3-D Structures for Optimal Structure Alignment Using Intelligent Algorithms and Data Structures, IEEE Transactions on Information Technology in Biomedicine, IEEE Press, Volume 14, Issue 6, pp. 1378-86, 2010.
52. Benxian Yue, Hongbo Liu, *Ajith Abraham* and Youakim Badr, A Multi-Swarm Synergetic Optimizer for Multi-Knowledge Extraction Using Rough Set, Neural Network World, Volume 20, Issue 4, pp. 501-517, 2010.
53. Hongbo Liu, *Ajith Abraham* and Aboul Ella Hassanien, Scheduling Jobs on Computational Grids Using Fuzzy Particle Swarm Algorithm, Future Generation Computing Systems, Elsevier Science, Netherlands, Volume 26, pp. 1336-1343, 2010.
54. Mohamed Taha, Hamed Nassar, Tarek Gharib and *Ajith Abraham* , An Efficient Algorithm for Incremental Mining of Temporal Association Rules, Data and Knowledge Engineering, Elsevier Science, Netherlands, Volume 69, pp. 800-815, 2010.
55. Radha Thangaraj, Millie Pant and *Ajith Abraham* , New Mutation Schemes for Differential Evolution Algorithm and Their Application to the Optimization of Directional Over-current Relay Settings, Applied Maths and Computation, Elsevier Science, Netherlands, Volume 216, Issue 2, pp. 532-544, 2010.
56. Samrat Sabat, Siba Udgata and *Ajith Abraham* , Artificial Bee Colony Algorithm for Small Signal Model Parameter Extraction of MESFET, Engineering Applications of Artificial Intelligence, Elsevier Science, Netherlands, Volume 23, Issue 5, pp. 689-694, 2010.
57. Shiguo Lian and *Ajith Abraham* , Intelligent Computing for Multimedia Assurance, International Journal of Neural Network World, Volume 20, No. 3, pp. 261-264, 2010.

58. Young Jae Lee, *Ajith Abraham* and Dong Hwa Kim, 3D Object Recognition Using Octree Model and Fast Search Algorithm, *Neural Network World*, Volume 20, No. 3, pp. 259-269, 2010.
59. Azah Kamilah Muda, Siti Mariyam Shamsuddin and *Ajith Abraham* , Improvement of Authorship Invarianceness for Individuality Representation in Writer Identification, *Neural Network World*, Volume 20, No. 3, pp. 371-387, 2010.
60. Sambarta Dasgupta, Swagatam Das, Arijit Biswas and *Ajith Abraham* , Automatic Circle Detection on Digital Images Using an Adaptive Bacterial Foraging Algorithm, *Soft Computing: Soft Computing - A Fusion of Foundations, Methodologies and Applications*, Springer Verlag, Germany, Volume 14, Issue 11, pp. 1151-1164, 2010.
61. Mario Kppen, *Ajith Abraham* and Hideyuki Takagi, *Soft Computing*, IEEE Systems, Man and Cybernetics Society, News Letter, Issue 29, pp. 1-2, 2010.
62. Juan Corchado, Javier Bajo, Dante Tapia and *Ajith Abraham* , Using Heterogeneous Wireless Sensor Networks in a Telemonitoring System for Healthcare, *IEEE Transactions on Information Technology in Biomedicine*, IEEE, USA, Volume 14, Issue 2, pp. 234-240, 2010.
63. Crina Grosan and *Ajith Abraham* , Approximating Pareto Frontier Using a Hybrid Line Search Approach, *Information Sciences*, Elsevier Science, Netherlands, Volume 180, pp. 2674-2695, 2010.
64. Arijit Biswas, Swagatam Das, *Ajith Abraham* and Sambarta Dasgupta, Stability of the Reproduction Operator in Bacterial foraging Optimization, *Journal of Theoretical Computer Science*, Elsevier Science, Netherlands, Volume 411, pp. 2127-2139, 2010.
65. Arijit Biswas, Swagatam Das, *Ajith Abraham* and Sambarta Dasgupta, Analysis of the Reproduction Operator in an Artificial Bacterial Foraging System, *Applied Maths and Computation*, Elsevier Science, Netherlands, 215 (9) pp. 3343-3355, 2010.
66. Fatos Xhafa and *Ajith Abraham* , Computational models and heuristic methods for Grid scheduling problems, *Future Generation Computing Systems*, Elsevier Science, Netherlands, volume 26, pp. 608-621, 2010.
67. Hsiang-Cheh Huang, Yueh-Hong Chen and *Ajith Abraham* , Optimized Watermarking with Swarm-Based Bacterial Foraging, *Journal of Information Hiding and Multimedia Signal Processing*, Volume 1, No. 1, pp. 51-58, 2010.
68. Alvaro Herrero, Emilio Corchado, Lourdes Saiz and *Ajith Abraham* , DIPIP: a Neural Knowledge Management Model Framework for Decision Support, *Computational Intelligence*, Blackwell Publishing, UK, Volume 26, Issue 1, pp. 26-56, 2010.
69. Hesam Izakian, *Ajith Abraham* and Behrouz Tork Ladani, An Auction Method for Resource Allocation in Computational Grids *Future Generation Computing Systems*, Elsevier Science, Netherlands, Volume 26, pp. 228-235, 2010.
70. *Ajith Abraham* , Emilio Corchado and Juan Corchado, Hybrid Reasoning Based Intelligent Systems, *International Journal of Reasoning-based Intelligent Systems (IJRIS)*, Inderscience Publishers, Switzerland, Volume 2, Issue 2, pp. 93-94, 2010.
71. Emilio Corchado, *Ajith Abraham* and Andre de Carvalho, *Hybrid Intelligent Algorithms and Applications*, Information Sciences, Elsevier Science, Netherlands, 180, pp. 2633-2634, 2010.
72. Hesam Izakian , Behrouz Tork Ladani, *Ajith Abraham* and Vaclav Snasel, A Discrete Particle Swarm Optimization Approach for Grid Job Scheduling, *International Journal of Innovative Computing, Information and Control*, Volume 6, No. 9, pp. 1-15, 2010.
73. Youakim Badr and *Ajith Abraham* , Autonomic Centric Applications, *International Journal of Autonomic Computing (IJAC)*, Inderscience Publishers, Switzerland, Volume 1, No. 3, pp. 223-225, 2010.
74. Aboul Ella Hassanien, *Ajith Abraham* , James Peters, Gerald Schaefer and Christopher Henry, Rough Sets and Near Sets in Medical Imaging: A Review, **IEEE Transactions on Information Technology in Biomedicine**, IEEE Press, USA, Volume 13, Issue 6, pp. 955-968, 2009.

75. Musrrat Ali, Millie Pant and *Ajith Abraham* , Simplex differential Evolution, *textbfActa Polytechnica Hungarica*, Volume 6, No. 5, pp. 95-115, 2009.
76. Hesam izakian, *Ajith Abraham* and Vaclav Snasel, Performance Comparison of Six Efficient Pure Heuristics for Scheduling Meta-Tasks on Heterogeneous Distributed Environments, **Neural Network World**, Volume 19, Issue 6, pp. 695-710, 2009.
77. Sambarta Dasgupta, Swagatam Das, *Ajith Abraham* and Arijit Biswas, Adaptive Computational Chemotaxis in Bacterial Foraging Optimization: An Analysis, **IEEE Transactions on Evolutionary Computation**, IEEE Press, USA, Volume 13, Issue 4, pp. 919-941, 2009.
78. Prithwish Chakraborty, Gourab Ghosh Roy, Swagatam Das and *Ajith Abraham* , An Improved Harmony Search Algorithm with Differential Mutation Operator, **Fundamenta Informaticae Journal**, IOS Press, Netherlands, Volume 95, Issue 4, pp.401-426, 2009.
79. Debarati Kundu, Kaushik Suresh, Sayan Ghosh, Swagatam Das and *Ajith Abraham* , Clustering Using Multi-objective Differential Evolution Algorithms: A Comparative Study, **Fundamenta Informaticae Journal**, IOS Press, Netherlands, Volume 97, Number 4, pp. 381-403, 2009.
80. Millie Pant, Radha Thangaraj and *Ajith Abraham* , Low Discrepancy Initialized Particle Swarm Optimization for Solving Constrained Optimization Problems, **Fundamenta Informaticae Journal**, IOS Press, Netherlands, Volume 95, Issue 4, pp. 511-531, 2009.
81. Hongbo Liu, *Ajith Abraham* and Zuwen Wang, A Multi-swarm approach to Multi-objective Flexible Job-shop Scheduling Problems, **Fundamenta Informaticae Journal**, IOS Press, Netherlands, Volume 95, Issue 4, pp.465-489, 2009.
82. Santi Caballe, Agata Lapedriza, David Masip, Fatos Xhafa and *Ajith Abraham* , Enabling Automatic Just-in-time Evaluation of In-class Discussions in On-line Collaborative Learning Practices, **Journal of digital information Management (JDIM)**, Volume 7, Issue 5, pp. 290-297, 2009.
83. Hesam izakian, *Ajith Abraham* and Vaclav Snasel, Metaheuristic Based Scheduling Meta-Tasks in Distributed Heterogeneous Computing Systems, **Sensors**, Molecular Diversity Preservation International , Switzerland, Volume 9, Issue 7, pp. 5339-5350, 2009.
84. Samrat Sabat, Leandro dos Santos Coelho and *Ajith Abraham* , MESFET DC Model Parameter Extraction Using Quantum Particle Swarm Optimization, **Microelectronics Reliability**, Elsevier Science, Netherlands, Volume 49, Issue 6, pp. 660-666, 2009.
85. Swagatam Das, Sambarta Dasgupta , Arijit Biswas, *Ajith Abraham* , and Amit Konar, On Stability of the Chemotactic Dynamics in Bacterial Foraging Optimization Algorithm, **IEEE Transactions on Systems, Man and Cybernetics - Part A**, IEEE Press, USA, Vol. 39, No. 3, pp. 670-679, 2009
86. Swagatam Das, Amit Konar , *Ajith Abraham* , and Uday Chakraborty, Differential Evolution with a Neighborhood Based Mutation Operator, **IEEE Transactions on Evolutionary Computation**, IEEE Press, USA, Volume 13, Issue 3, pp. 526-553, 2009.
87. Alvaro Herrero, Emilio Corchado, Maria Pellicer and *Ajith Abraham* , MOVIH-IDS: A Mobile-Visualization Hybrid Intrusion Detection System, **Neurocomputing Journal**, Elsevier Science, Netherlands, Volume 72, Issues 13-15, pp. 2775-2784, 2009.
88. Crina Grosan and *Ajith Abraham* , On a Class of Global Optimization Test Functions, **Neural Network World**, Volume 19, No. 2, pp. 247-252, 2009.
89. Brijesh Kumar Chaurasia, Shekhar Verma, G. S. Tomar and *Ajith Abraham* , Optimizing Pseudonym Updation in Vehicular Ad-Hoc Networks, **Transactions on Computational Science IV, Special Issue on Security in Computing**, Lecture Notes in Computer Science 5430, Springer Berlin / Heidelberg, pp. 136-148, 2009.
90. Lizhi Peng, Bo Yang, Yuehui Chen and *Ajith Abraham* , Data Gravitation Based Classification, **Information Sciences**, Elsevier Science, The Netherlands, Volume 179, Issue 6, pp. 809-819, 2009.

91. Sambarta Dasgupta , Arijit Biswas, Swagatam Das and *Ajith Abraham* , Modeling and Analysis of the Population Dynamics of Differential Evolution Algorithm, **AI Communications - The European Journal on Artificial Intelligence**, IOS Press, Netherlands, Volume 22, No. 1, pp. 1-20, 2009.
92. Kaushik Suresh, Debarati Kundu, Sayan Ghosh, Swagatam Das, *Ajith Abraham* and Sang Yong Han, Multi-objective Differential Evolution for Dynamic Clustering with Application to Microarray Data Analysis, **Sensors**, Molecular Diversity Preservation International , Switzerland, Volume 9, Issue 5, pp. 3981-4004, 2009.
93. Crina Grosan and *Ajith Abraham* , A Novel Global Optimization Technique for High Dimensional Functions, **International Journal of Intelligent Systems**, John Wiley and Sons, USA, Volume 24, Issue 4, pp. 421 - 440, 2009.
94. Swagatam Das, Arijit Biswas, *Ajith Abraham* and Sambarta Dasgupta, Design of Fractional Order PID Controllers with an Improved Differential Evolution, **Engineering Applications of Artificial Intelligence**, Elsevier Science, The Netherlands, Volume 22, Issue 2, pp. 343-350, 2009.
95. Zhenxiang Chen, Haiyang Wang, *Ajith Abraham* , Crina Grosan, Bo Yang, Yuehui Chen and Lin Wang, Improving Neural Network Classification Using Further Division of Recognition Space, **International Journal of Innovative Computing, Information and Control**, Volume 5, 2009.
96. Zhenxiang Chen, Bo Yang, Yuehui Chen, *Ajith Abraham* , Crina Grosan, Lizhi Peng, Hybrid Traffic Classifier for Peer-to-Peer Systems Based on Network Processors, **Applied Soft Computing**, Elsevier Science, The Netherlands, Volume 9, Issue 2, pp. 685-694, 2009.
97. Javier Bajo, Juan Corchado, Yanira De Paz, Juan De Paz, Sara Rodriguez, Quintin Martin and *Ajith Abraham* , SHOMAS: Intelligent Guidance and Suggestions in Shopping Centres, **Applied Soft Computing**, Elsevier Science, The Netherlands, Volume 9, pp. 851-862, 2009.
98. Aboul Ella Hassanien, *Ajith Abraham* and Crina Grosan, Spiking Neural Network and Wavelets for Hiding Iris Data in Digital Images, **Soft Computing - A Fusion of Foundations, Methodologies and Applications**, Springer Verlag, Germany, Volume 13, Issue 4, pp. 401-416, 2009.
99. Crina Grosan, *Ajith Abraham* and Aboul Ella Hassainen, Designing Resilient Networks Using Multicriteria Metaheuristics, **Telecommunication Systems: Modelling, Analysis, Design and Management**, Springer Verlag, Germany, Volume 40, Issues 1/2, pp. 75-88, 2009.
100. *Ajith Abraham* , Hybrid Soft Computing and Applications, Hybrid Computational Intelligence, **International Journal of Computational Intelligence and Applications**, World Scientific Press, Singapore, Vol. 8, No. 1, pp. 5-7, 2009.
101. *Ajith Abraham* , James Peters, Lei Wang and Zhihua Cui, Swarm Intelligence: Foundations and Applications, **Fundamenta Informaticae**, IOS Press, Netherlands, Volume 95, pp. 1-2, 2009.
102. *Ajith Abraham* , Emilio Corchado and Juan Corchado, Hybrid learning Machines, **Neurocomputing Journal**, Elsevier Science, Netherlands, Volume 72, Issues 13-15, pp. 2729-2730, 2009.
103. Aboul ella Hassanien and *Ajith Abraham* , Rough Morphology Hybrid Approach for Mammography Image Classification and Prediction, **International Journal of Computational Intelligence and Applications**, World Scientific Press, Singapore, Volume 7, Issue 1, pp. 17-42, 2008.
104. Sandipan Dey, *Ajith Abraham* , Bijoy Bandyopadhyay and Sugata Sanyal, Data Hiding Techniques Using Prime and Natural Numbers, **Journal of Digital Information Management**, Volume 6, No. 6. pp. 463-485, 2008.
105. Hameed Al-Qaheri, Aboul Ella Hassanien and *Ajith Abraham* , Discovering Stock Price Prediction Rules Using Rough Sets, **Neural Network World**, Volume 18, No. 3, pp. 181-198, 2008.

106. Fatos Xhafa, Bernat Duran, *Ajith Abraham* and Keshav Dahal, Tuning Struggle Strategy in Genetic Algorithms for Scheduling in Computational Grids, **Neural Network World**, Volume 18, No. 3, pp. 209-225, 2008.
107. Crina Grosan, *Ajith Abraham* and Stefan Tigan, Multicriteria Programming in Medical Diagnosis and Treatments, **Applied Soft Computing**, Elsevier Science, Volume 8, Issue 4, pp. 1407-1417, 2008.
108. Dong-Hwa Kim and *Ajith Abraham* , Optimal Learning of Fuzzy Neural Network Using Artificial Immune Algorithm, **Neural Network World**, Volume 18, No. 2, pp. 147-170, 2008.
109. Crina Grosan and *Ajith Abraham* , Multiple Solutions for a System of Nonlinear Equations, **International Journal of Innovative Computing, Information and Control**, Volume 4, Issue 9, pp. 2161-2170, 2008.
110. Crina Grosan and *Ajith Abraham* , A New Approach for Solving Nonlinear Equation Systems, **IEEE Transactions on Systems, Man and Cybernetics - Part A**, IEEE Press, USA, Volume 38, No. 3, pp. 698-714, 2008.
111. Juan Corchado, Javier Bajo and *Ajith Abraham* , GERAmI: Improving the delivery of health care in geriatric residences, **IEEE Intelligent Systems**, Special issue on Ambient Intelligence, IEEE Press, Volume 23, Issue 2, pp. 19-25, 2008.
112. Swagatam Das, *Ajith Abraham* and Amit Konar, Adaptive Clustering Using Improved Differential Evolution Algorithm, **IEEE Transactions on Systems, Man and Cybernetics - Part A**, IEEE Press, USA, Volume 38, No.1, pp. 218-237, 2008.
113. Swagatam Das, *Ajith Abraham* and Amit Konar, Automatic Kernel Clustering with Multi-Elitist Particle Swarm Optimization Algorithm, **Pattern Recognition Letters**, Elsevier Science, Volume 29, pp. 688-699, 2008.
114. Jeng-Shyang Pan and *Ajith Abraham* , Bio-Inspired Information Hiding, **Soft Computing: Soft Computing - A Fusion of Foundations, Methodologies and Applications**, Springer Verlag, Germany, Volume 13, Issue 4, pp. 319-320, 2008.
115. *Ajith Abraham* , Dennis Jarvis, Jacque Jarvis and Lakhmi Jain, Innovations in Intelligent Agent Technology, **Multiagent and Grid Systems - An International Journal**, IOS Press, The Netherlands, Volume 4, No. 4, pp. 347-349, 2008.
116. Richard Chbeir, *Ajith Abraham* and Pit Pichappan, Computational Intelligence in Digital Information Management, **International Journal of Innovative Computing and Applications (IJICA)**, Volume 1, No. 3, pp. 159-160, 2008.
117. Richard Chbeir, Pit Pichappan and *Ajith Abraham* , Innovations in Information Retrieval and Digital Information Management, **Journal of Digital Information Management**, , Volume 6, No. 1, pp. 1-2, 2008.
118. Jeng-Shyang Pan and *Ajith Abraham* , Information Hiding and Multimedia Signal Processing, **Journal of Digital Information Management**, Volume 6, No. 2, pp. 140-142, 2008.
119. Arijit Biswas, Sambarta Dasgupta, Swagatam Das, and *Ajith Abraham* , A Synergy of Differential Evolution and Bacterial Foraging Algorithm for Global Optimization, **Neural Network World**, Volume 17, No. 6, pp. 607-626, 2007.
120. Roselina Sallehuddin, Siti Mariyam Shamsuddin, Siti Zaiton Hashim and *Ajith Abraham* , Forecasting time series using hybrid grey relational artificial neural network and auto regressive integrated moving average model, **Neural Network World**, Volume 17, No. 6, pp. 505-506, 2007.
121. Hongbo Liu and *Ajith Abraham* , An Hybrid Fuzzy Variable Neighborhood Particle Swarm Optimization Algorithm for Solving Quadratic Assignment Problems, **Journal of Universal Computer Science**, Volume 13, No. 7, pp. 1032-1054, 2007.
122. Sandipan Dey, *Ajith Abraham* , Sugata Sanyal, A Very Simple Approach for 3-D to 2-D Mapping, **International Journal on Image Processing and Communications**, Poland, Volume 11, No. 2, pp. 75 - 82, 2007.

123. Fatos Xhafa, Javier Carretero and *Ajith Abraham* , Genetic Algorithm Based Schedulers for Grid Computing Systems, **International Journal of Innovative Computing, Information and Control**, Volume 3, Issue 5, pp. 1053-1071, 2007.
124. *Ajith Abraham* , Crina Grosan and Stefan Tigan, Ensemble of Hybrid Neural Network Learning Approaches for Designing Pharmaceutical Drugs, **Neural Computing and Applications**, Springer Verlag London Ltd., Volume 16, No. 3, pp. 307 - 316, 2007.
125. Yuehui Chen, Bo Yang, *Ajith Abraham* and Lizhi Peng, Automatic Design of Hierarchical Takagi-Sugeno Fuzzy Systems using Evolutionary Algorithms, **IEEE Transactions on Fuzzy Systems**, IEEE Press, USA, Volume 15, No. 3, pp. 385-397, 2007.
126. Sungyun Park, Kwangcheol Shin, *Ajith Abraham* and SangYong Han, Optimized Self Organized Sensor Networks, **Sensors**, Molecular Diversity Preservation International, Switzerland, Volume 7, Issue 5, pp. 730-742, 2007.
127. Dong-Hwa Kim, *Ajith Abraham* and Jae-Chun Ho, Hybrid Genetic Algorithm and Bacterial Foraging Approach for Global Optimization, **Information Sciences**, Elsevier Science, Volume 177, Issue 18, pp. 3918 - 3937, 2007.
128. Srinivas Mukkamala, Andrew Sung and *Ajith Abraham* , Hybrid multi-agent framework for detection of stealthy probes, **Applied Soft Computing**, Elsevier Science, Volume 7, Issue 3, pp. 631-641, 2007.
129. Hongbo Liu, *Ajith Abraham* and Weishi Zhang, A Fuzzy Adaptive Turbulent Particle Swarm Optimization, **International Journal of Innovative Computing and Applications**, Volume 1, Issue 1, pp. 39 - 47, 2007.
130. Hongbo Liu, *Ajith Abraham* and Maurice Clerc, Chaotic Dynamic Characteristics in Swarm Intelligence, **Applied Soft Computing**, Elsevier Science, Volume 7, pp. 1019 - 1026, 2007.
131. Costin Badica, Amelia Badica, Elvira Popescu and *Ajith Abraham* , L-Wrappers: Concepts, Properties and Construction: A Declarative Approach to Data Extraction from Web Sources, **Softcomputing**, Springer Verlag, Germany, Volume 11, Number 8, pp. 753-772, 2007.
132. Imran Maqsood and *Ajith Abraham* , Weather Analysis Using an Ensemble of Connectionist Learning Paradigms, **Applied Soft Computing**, Elsevier Science, Volume 7, pp. 995 -1004, 2007.
133. Bhavyesh Divecha, *Ajith Abraham* , Crina Grosan and Sugata Sanyal, Impact of Node Mobility on MANET Routing Protocols Models, **Journal of Digital Information Management**, Volume 5, Number 1, pp. 19-24, 2007.
134. Yuehui Chen, Bo Yang and *Ajith Abraham* , Flexible Neural Trees Ensemble for Stock Index Modeling, **Neurocomputing**, Elsevier Science, Netherlands, Vol. 70, Issues 4-6, pp. 697-703, 2007.
135. Xun Yue, *Ajith Abraham* , Zhong-xian Chi , Yan-you Hao and Hongwei Mo, Artificial Immune System Inspired Behavior Based Anti-Spam Filter, **Softcomputing**, Springer Verlag, Germany, Volume 11, Number 8, pp. 729-740, 2007.
136. Yuehui Chen, *Ajith Abraham* and Bo Yang, Hybrid Flexible Neural Tree Based Intrusion Detection Systems, **International Journal of Intelligent Systems**, John Wiley & Sons, USA, Volume 22, Issue 4, pp. 337-352, 2007.
137. *Ajith Abraham* , Ravi Jain, Johnson Thomas and Sang-Yong Han, D-SCIDS: Distributed Soft Computing Intrusion Detection Systems, **Journal of Network and Computer Applications**, Elsevier Science, Volume 30, Issue 1, pp.81-98, 2007.
138. Arijit Bhattacharya, *Ajith Abraham* , Pandian Vasant and Crina Grosan, Meta-Learning Evolutionary Artificial Neural Network for Selecting Flexible Manufacturing Systems Under Disparate Level-of-Satisfaction of Decision Maker, **International Journal of Innovative Computing, Information and Control**, Volume 3, No. 1, pp. 131-140, 2007.
139. *Ajith Abraham* , Crina Grosan and Carlos Martin-Vide, Evolutionary Design of Intrusion Detection Programs, **International Journal of Network Security**, Vol.4, No.3, pp. 328-339, 2007.

140. Sandhya Peddabachigari, *Ajith Abraham* , Crina Grosan and Johnson Thomas, Modeling Intrusion Detection System Using Hybrid Intelligent Systems, **Journal of Network and Computer Applications**, Elsevier Science, Volume 30, Issue 1, pp. 114-132, 2007.
141. *Ajith Abraham* , Dusan Husek and Vaclav Snasel, Hybrid Computational Intelligence and Applications, **Neural Network World**, Volume 17, No. 6, pp. 505-506, 2007.
142. *Ajith Abraham* , Yuehui Chen and Fatos Xhafa, Computational Intelligence in Information Retrieval, **Journal of Digital Information Management**, Volume 5, Issue 3, pp. 97-98, 2007.
143. Fuchun Sun, Yuehui Chen and *Ajith Abraham* , Intelligent Control and Robotics, **International Journal of Neural, Parallel and Scientific Computations**, Volume 15, pp. 1-4, 2007.
144. *Ajith Abraham* , Yukio Ohsawa and Yasuhiko Dote, Web Intelligence and Chance Discovery, **Soft Computing: Soft Computing - A Fusion of Foundations, Methodologies and Applications**, Springer Verlag, Germany, Volume 11, Number 8, pp. 695-696, 2007.
145. Nadia Nedjah, *Ajith Abraham* and Luiza Mourelle, Hybrid Artificial Neural Network , **International Journal of Neural Computing and Applications**, Springer Verlag London Ltd., Volume 16, No. 3, pp. 207-208, 2007.
146. *Ajith Abraham* , Kate Smith, Ravi Jain and Lakhmi Jain, Network and Information Security: A Computational Intelligence Approach, **Journal of Network and Computer Applications**, Elsevier Science, Netherlands, Volume 30, Issue 1, pp. 1-3, 2007.
147. *Ajith Abraham* and Crina Grosan, Decision Support Systems Using Ensemble Genetic Programming, **Journal of Information Knowledge Management**, World Scientific Publishing Co., Singapore, Vol. 5, No. 4, pp. 303-313, 2006.
148. Yuehui Chen, *Ajith Abraham* and Bo Yang, Feature Selection and Classification Using Flexible Neural Tree, **Neurocomputing**, Elsevier Science, Netherlands, Volume 70, pp. 305-313, 2006.
149. *Ajith Abraham* and Crina Grosan, Automatic Programming Methodologies for Electronic Hardware Fault Monitoring, **Journal of Universal Computer Science**, Volume 12, No.4, pp. 408-431, 2006.
150. *Ajith Abraham* , Sonja Petrovic-Lazerevic and Ken Coghill, EvoPol: A Decision Support System for Social Regulations Policies, **Kybernetes**, Emerald, England, Volume 35, No.6, pp. 814-824, 2006.
151. Dongjoon Kim, Sangkyu Lee, *Ajith Abraham* and Sangyong Han, Dynamic Priority Allocation Scheme of Messages for a Differentiated Web Services Satisfying Service Level Agreement, **Journal of Digital Information Management**, Volume 4, No.1, pp. 26-31, 2006.
152. Vipul Goyal, Virendra Kumar, Mayank Singh, *Ajith Abraham* and Sugata Sanyal, A New Protocol to Counter Online Dictionary Attacks, **Computers and Security**, Elsevier Science, Volume 25, Issue 2, pp. 114-120, 2006.
153. Yuehui Chen, Bo Yang and *Ajith Abraham* , Ensemble of Flexible Neural Trees for Breast Cancer Detection, **International Journal of Information Technology and Intelligent Computing**, ISSN 1895 8648, Volume 1, Issue 1, pp. 187-202, 2006.
154. Crina Grosan and *Ajith Abraham* , Evolving Computer Programs for Knowledge Discovery, **Journal of System Management**, ISSN 0972-6896, Volume 4, No. 2, pp. 7-24, 2006.
155. KwangCheol Shin, *Ajith Abraham* and Sangyong Han, Self Organizing Sensors by Minimization of Cluster Heads Using Intelligent Clustering, **Journal of Digital Information Management**, Volume 4, No. 1, pp. 87-93, 2006.
156. Ruiyuan Guo, *Ajith Abraham* and Marcin Paprzycki, Analyzing Call Center Performance: A Data Mining Approach, **Journal of Knowledge Management**, ISSN 0792-9216, Vol. 4, No. 1, pp. 24-37, 2006.
157. *Ajith Abraham* and Khalid Saeed, **Image Analysis and Biometrics**, International Journal of Image Processing and Communications, ISSN 1425-140X, Poland, Volume 11, No. 2, pp. 5-6, 2006.

158. Nadia Nedjah, *Ajith Abraham* and Luiza Mourelle, **Knowledge Discovery Using Advanced Computational Intelligence Tools**, Journal of Information Knowledge Management (JIKM), World Scientific Publishing Co., Singapore, Vol. 5, No. 4, pp. 1, 2006.
159. *Ajith Abraham* , Sung-bae Cho, Thomas Hite and Sang-Yong Han, **Computational Intelligence in Web Services Practices** , Journal of Advanced Computational Intelligence and Intelligent Informatics (JACIII), ISSN: 1343-0130, Fuji Press, Japan, Volume 10, No. 5, pp. 703-704, 2006.
160. *Ajith Abraham* , Jen-Yao Chung and Sang-Yong Han, **Web Services: Recent Advances and Applications**, Journal of Digital Information Management, Volume 4, No. 1, pp. 1-3, 2006.
161. Soumya Banerjee, *Ajith Abraham* and Crina Grosan, Intelligent Decision-making for New Product Development and Market Positioning Using Soft Computing, **Journal of System Management**, Vol. 3, No.4, pp. 51-68, 2005.
162. *Ajith Abraham* , Crina Grosan and Yuehui Chen, Cyber Security and the Evolution in Intrusion Detection Systems, **Journal of Engineering and Technology**, ISSN 0973-0559, I-Manager Publications, Vol. 1, No. 1, pp. 74-81, 2005.
163. Okkyung Choi, Sangyong Han and *Ajith Abraham* , Integration of Semantic Data Using a Novel Web Based Information Query System, **International Journal of Web Services Practices**, Vol.1, No.1-2, pp. 21-29, 2005.
164. Srilatha Chebrolu, *Ajith Abraham* and Johnson Thomas, Feature Deduction and Ensemble Design of Intrusion Detection Systems, **Computers and Security**, Elsevier Science, Vol. 24/4, pp. 295-307, 2005.
165. Crina Grosan, *Ajith Abraham* and Monica Nicoara, Search Optimization Using Hybrid Particle Sub-Swarms and Evolutionary Algorithms, **International Journal of Simulation Systems, Science and Technology**, UK, Volume 6, Nos. 10 and 11, pp. 60-79, 2005.
166. Srinivas Mukkamala, Andrew Sung and *Ajith Abraham* , Intrusion Detection Using Ensemble of Soft Computing and Hard Computing Paradigms, **Journal of Network and Computer Applications**, Elsevier Science, Vol. 28, Issue 2, pp. 167-182, 2005.
167. Tibebe Tesema, *Ajith Abraham* and Crina Grosan, Rule Mining and Classification of Road Accidents Using Adaptive Regression Trees, **International Journal of Simulation Systems, Science and Technology**, UK, Volume 6, Nos. 10 and 11, pp. 80-94, 2005.
168. Yuehui Chen, Bo Yang, Jiwen Dong and *Ajith Abraham* , Time Series Forecasting Using Flexible Neural Tree Model, **Information Sciences**, Elsevier Science, Vol. 174, Issues 3/4, pp. 219-235, 2005.
169. Miao Chong, *Ajith Abraham* and Marcin Paprzycki, Traffic Accident Data Analysis Using Machine Learning Paradigms, **Informatica: An International Journal of Computing and Informatics**, Vol. 29, No. 1, pp. 89-98, 2005.
170. Xiaozhe Wang, *Ajith Abraham* and Kate A. Smith, Intelligent Web Traffic Mining and Analysis, **Journal of Network and Computer Applications**, Elsevier Science, Vol. 28, Issue 2, pp. 147-165, 2005.
171. Rangarajan Vasudevan, *Ajith Abraham* and Sugata Sanyal, A Novel Scheme for Data Transfer Over Computer Networks, **Journal of Universal Computer Science**, Volume 11, Issue 1, pp. 104-121, 2005.
172. Janos Abonyi, Balazs Feil and *Ajith Abraham* , Computational Intelligence in Data Mining, **Informatica: An International Journal of Computing and Informatics**, Vol. 29, No. 1, pp. 3-12, 2005.
173. Ron Edwards, *Ajith Abraham* and Sonja Petrovic-Lazarevic, Computational Intelligence to Model the Export Behaviour of Multinational Corporation Subsidiaries in Malaysia, **International Journal of the American Society for Information Science and Technology** (JASIST), John Wiley & Sons Inc., USA, Volume 56, Issue 11 , pp. 1177 - 1186, 2005.

174. Soumya Banerjee, Crina Grosan, *Ajith Abraham* and P.K. Mahanti, Intrusion Detection on Sensor Networks Using Emotional Ants, **International Journal of Applied Science and Computations**, USA, Vol.12, No.3, pp.152-173, 2005.
175. *Ajith Abraham* , Sang Yong Han, Antony Satyadas and Witold Abramowicz, **Innovations in Web Services Practices** , International Journal of Web Services Practices, Volume 1, No.1-2, pp. 1-3, 2005.
176. *Ajith Abraham* and Crina Grosan, Soft Computing in Simulation and Modeling, **International Journal of Simulation Systems, Science Technology**, UK, Volume 6, Nos. 10 and 11, pp. 1-3, 2005.
177. Ravi Jain and *Ajith Abraham* , 'Hybrid Intelligence Using Rough Sets', **The International Journal of Hybrid Intelligent Systems (IJHIS)**, IOS Press, The Netherlands, Volume 2, No. 2, pp. 89-90, 2005.
178. Janos Abonyi and *Ajith Abraham* , 'Computational Intelligence in Data Mining', **Informatica: An International Journal of Computing and Informatics**, Volume 29, No. 1, pp. 1-2, 2005.
179. *Ajith Abraham* and Lakhmi Jain, 'Computational Intelligence on the Internet', **Journal of Network and Computer Applications**, Elsevier Science, The Netherlands, Volume 28, Issue 2, pp. 1-3, 2005.
180. *Ajith Abraham* , Johnson Thomas, Sugata Sanyal and Lakhmi Jain, **Information Assurance and Security**, Journal of Universal Computer Science, Volume 11, Issue 1, pp. 1-3, 2005.
181. Srinivas Mukkamala, Andrew H. Sung and *Ajith Abraham* , Designing Intrusion Detection Systems: Architectures and Perspectives, **Annual Review of Communications**, The International Engineering Consortium (IEC), Chicago, USA, Volume 57, pp. 1229-1241, 2004.
182. *Ajith Abraham* and Sajith Philip and P.K. Mahanti, Soft Computing Models for Weather Forecasting, **International Journal of Applied Science and Computations**, USA, Vol.11, No.3, pp.106-117, 2004.
183. *Ajith Abraham* , Meta-Learning Evolutionary Artificial Neural Networks, **Neurocomputing**, Elsevier Science, Netherlands, Vol. 56c, pp. 1-38, 2004.
184. Sandhya Peddabachigari, *Ajith Abraham* and Johnson Thomas, Intrusion Detection Systems Using Decision Trees and Support Vector Machines, **International Journal of Applied Science and Computations**, USA, Vol.11, No.3, pp.118-134, 2004.
185. Imran Maqsood, Muhammad Riaz Khan and *Ajith Abraham* , Neural Network Ensemble Method for Weather Forecasting, **Neural Computing and Applications**, Springer Verlag London Ltd., Volume 13, No. 2, pp. 112-122, 2004.
186. Cong Tran, *Ajith Abraham* and Lakhmi Jain, Modeling Decision Support Systems Using Hybrid Neurocomputing, **Neurocomputing**, Elsevier Science, Netherlands, Volume 61C, pp. 85-97, 2004.
187. Ron Edwards, *Ajith Abraham* and Sonja Petrovic-Lazarevic, Neuro-Fuzzy Modeling of Export Behaviour of Multinational Corporation Subsidiaries, **International Journal of Neural, Parallel Scientific Computations**, Vol. 12, pp. 21-36, 2004.
188. Sugata Sanyal, Rangarajan Vasudevan, *Ajith Abraham* and Marcin Paprzycki, Grid Security and Integration with Minimal Performance Degradation, **Journal of Digital Information Management**, Vol. 2, Number. 3, pp. 122-126, 2004.
189. Golam Sorwar and *Ajith Abraham* , DCT Based Texture Classification Using Soft Computing Approach, **Malaysian Journal of Computer Science**, Volume 17, No. 1, pp. 13-23, 2004.
190. Dhaval Gada, Rajat Gogri, Punit Rathod, Zalak Dedhia and Nirali Mody, Sugata Sanyal and *Ajith Abraham* , A Distributed Security Scheme for Ad Hoc Networks, **ACM Crossroads**, Special Issue on Computer Security, Volume 11, 2004.
191. Ravi Jain and *Ajith Abraham* , A Comparative Study of Fuzzy Classifiers on Breast Cancer Data, **Australasian Physical And Engineering Sciences in Medicine**, Australia, Volume 27, No.4, pp. 147-152, 2004.

192. *Ajith Abraham* , Emilia Barakova, Ravi Jain, Istvan Jonyer and Lakhmi Jain, **Hybrid Neurocomputing and Applications**, Neurocomputing Journal, Elsevier Science, Netherlands, Volume 61C, pp. 1-3, 2004.
193. *Ajith Abraham* and Lakhmi Jain, **Optimal Knowledge Mining**, Journal of Fuzzy Optimization and Decision Making, Kluwer Academic Publishers, USA, Volume 3, Issue 2, pp. 117-118, 2004.
194. Dammindala Alahakoon, *Ajith Abraham* and Lakhmi Jain, **Neural Networks for Enhanced Intelligence**, International Journal of Neural Computing Applications, Springer Verlag London Ltd., Volume 13, No. 2, pp. 99-100, 2004.
195. Sonja Petrovic-Lazerevic and *Ajith Abraham* , **Computational Intelligence in Management**, International Journal of Neural, Parallel Scientific Computations, ISSN:1061-5369, Volume 12, Issue 1, pp. 1-2, 2004.
196. *Ajith Abraham* , Business Intelligence from Web Usage Mining, **Journal of Information Knowledge Management** (JIKM), World Scientific Publishing Co., Singapore, Vol. 2, No. 4, pp. 375-390, 2003.
197. Sonja Petrovic-Lazerevic, Ken Coghill and *Ajith Abraham* , Neuro-Fuzzy Support of Knowledge Management in Social Regulation, **Knowledge Based Systems**, Elsevier Science, Netherlands, Vol. 17, Issue 1, pp. 57-60, 2003.
198. *Ajith Abraham* , Morshed Chowdury and Sonja Petrovic-Lazerevic, Australian Forex Market Analysis Using Connectionist Models, **Journal of Management Theory and Practice**, No. 29, VIII, pp. 18-22, 2003.
199. Sonja Petrovic-Lazerevic and *Ajith Abraham* , Hybrid Fuzzy-Linear Programming Approach for Multi Criteria Decision Making Problems, **International Journal of Neural, Parallel Scientific Computations**, USA, Volume 11, Issues (1 & 2), pp. 53-68, 2003.
200. *Ajith Abraham* , Ninan Sajith Philip and P. Saratchandran, Modeling Chaotic Behavior of Stock Indices Using Intelligent Paradigms, **International Journal of Neural, Parallel and Scientific Computations**, USA, Volume 11, Issue (1 & 2), pp. 143-160, 2003.
201. *Ajith Abraham* and Lakhmi Jain, **Knowledge Engineering**, International Journal of Intelligent and Fuzzy Systems, IOS Press, Netherlands, Volume 14, Number 3, pp. 119-120, 2003.
202. *Ajith Abraham* and P. Saratchandran, **Intelligent Systems and Applications**, International Journal of Neural, Parallel Scientific Computations, Volume 11, Issues 1-2, USA, pp. 1-2, 2003.
203. Muhammad Riaz Khan and *Ajith Abraham* , Short Term Load Forecasting Models in Czech Republic Using Soft Computing Techniques, **International Journal of Knowledge-Based Intelligent Engineering Systems**, IOS Press Netherlands, Volume 7, No. 4, pp. 172-179, 2003.
204. Imran Maqsood, Muhammad Riaz Khan and *Ajith Abraham* , Intelligent Weather Monitoring Systems Using Connectionist Models, **International Journal of Neural, Parallel & Scientific Computations**, USA, Volume 10, pp. 157-158, 2002.
205. *Ajith Abraham* and Baikunth Nath, A Neuro-Fuzzy Approach for Forecasting Electricity Demand In Victoria, **Applied Soft Computing**, Elsevier Science, Volume 12, pp. 127-138, 2001.

#### BOOK CHAPTERS

##### Peer Reviewed Book Chapters Published (or in press) by International Publishers

1. Lars Nolle, Mario Koeppen, Gerald Schaefer and *Ajith Abraham* , Intelligent Computational Optimization in Engineering: Techniques and Applications, Intelligent Computational Optimization in Engineering: Techniques and Applications, Studies in Computational Intelligence, Springer Verlag, Germany, ISBN 978-3-642-21704-3, pp. 1-24, 2011.

2. Mrutyunjaya Panda, *Ajith Abraham*, Sachidananda Dehuri and Manas Ranjan Patra, Performance Evaluation of Social Network Using Data Mining Techniques, Computational Social Networks: Mining and Visualization, Series in Computer Communications and Networks, Springer Verlag, London, 2011.
3. Sarina Sulaiman, Siti Mariyam Shamsuddin and *Ajith Abraham*, Implementation of Social Network Analysis for Web Cache Content Mining Visualization, Computational Social Networks: Mining and Visualization, Series in Computer Communications and Networks, Springer Verlag, London, 2011.
4. Aboul Ella Hassanien, Hameed Al-Qaheri and *Ajith Abraham*, Rough fuzzy approach for breast cancer analysis, Rough Fuzzy Image Analysis: Foundations and Applications, J.F. Peters and S.K. Pal (Eds.), CRC Press, USA, 2010.
5. Swagatam Das, *Ajith Abraham* and Bijaya Panigrahi, An Introduction to Computational Intelligence, **Computational Intelligence and Pattern Analysis in Biological Informatics**, U. Maulik et al. (Eds.), John Wiley, ISBN 978-0-470-58159-9, pp. 3-37, 2010.
6. Pavel Krmer, Vclav Snsel, Jan Platos, *Ajith Abraham* and Hesam Ezakian, Evolving Schedules of Independent Tasks by Differential Evolution, Intelligent Networking, Collaborative Systems and Applications, Springer Verlag, Germany, ISBN: 978-3-642-16792-8, pp. 79-94, 2010.
7. Aboul Ella Hassanien and *Ajith Abraham*, Rough fuzzy approach for breast cancer analysis, **Rough Fuzzy Image Analysis: Foundations and Applications** J.F. Peters and S.K. Pal (Eds.), CRC Press, USA, 2010.
8. Bijaya Panigrahi, Ravikumar Pandi, Swagatam Das and *Ajith Abraham*, A Bandwidth-Adaptive Harmony Search Algorithm to Solve Optimal power Flow Problems with Non-smooth Cost Functions, in Z. W. Geem (Ed.), **Recent Advances in Harmony Search Algorithm**, Studies in Computational Intelligence, Germany, ISBN 978-3-642-04316-1, pp. 65-75, 2010.
9. Nor Bahiah Hj Ahmad, Siti Mariyam Shamsuddin and *Ajith Abraham*, Granular Mining of Student's Learning Behavior in Learning Management System Using Rough Set Technique, **Computational Intelligence for Technology Enhanced Learning**, ISBN 978-3-642-11223-2, pp. 99-124, 2010.
10. Arun Patil and *Ajith Abraham*, Intelligent and Interactive Web-based Tutoring System in Engineering Education: Reviews, Perspectives and Development, **Computational Intelligence for Technology-Enhanced Learning**, Xhafa et al. (Eds.) Studies in Computational Intelligence, Springer Verlag, Germany, ISBN 978-3-642-11223-2, pp. 79-97, 2010.
11. Vaclav Snsel, *Ajith Abraham*, Suhail Owais, Jan Platos and Pavel Kromer, User Profiles Modeling in Information Retrieval System, **Emergent Web Intelligence: Advanced Information Retrieval**, Y. Badr et al. (Eds.), Springer Verlag, London, ISBN 978-1-84996-073-1, pp. 169-198, 2010.
12. Milos Kudelka, Vaclav Snsel, Zdenek Horak, Aboul Ella Hassanien and *Ajith Abraham*, Web Communities Defined by Web Page Content, **Computational Social Networks: Tools, perspectives and Analysis**, Springer Verlag, London, ISBN ISBN 978-1-84882-228-3, pp. 349-370, 2010.
13. Hongbo Liu, *Ajith Abraham* and Benxian Yue, Nature Inspired Multi-Swarm Heuristics for Multi-Knowledge Extraction, **Recent Advances in Machine Learning: Dedicated to the memory of Ryszard Michalski**, Koronacki et al. (Eds.), Studies in Computational Intelligence, Springer Verlag, Germany, ISBN 978-3-642-05178-4, pp. 445-466, 2009.
14. Vaclav Snsel, *Ajith Abraham*, Suhail Owais, Jan Platos and Pavel Kromer, Optimizing Information Retrieval Using Evolutionary Algorithms and Fuzzy Inference System, **Foundations of Computational Intelligence, Volume 4: Bio-Inspired Data Mining**, Studies in Computational Intelligence, Springer Verlag, Germany, ISBN 978-3-642-01087-3, pp. 299-324, 2009.
15. *Ajith Abraham* and Hongbo Liu, Turbulent Particle Swarm Optimization with Fuzzy Parameter Tuning, **Foundations of Computational Intelligence Vol 3: Global Optimization**, Studies in Computational Intelligence, Springer Verlag, Germany, ISBN: 978-3-642-01084-2, pp. 291-312, 2009.

16. Swagatam Das, Arijit Biswas, Sambarta Dasgupta and *Ajith Abraham* , Bacterial Foraging Optimization Algorithm: Theoretical Foundations, Analysis, and Applications, **Foundations of Computational Intelligence Vol 3: Global Optimization**, Studies in Computational Intelligence, Springer Verlag, Germany, ISBN: 978-3-642-01084-2, pp. 23-55, 2009.
17. Millie Pant, Radha Thangaraj and *Ajith Abraham* , Particle Swarm Optimization: Performance Tuning and Empirical Analysis, , **Foundations of Computational Intelligence Vol 4: Global Optimization**, Studies in Computational Intelligence, Springer Verlag, Germany, ISBN: 978-3-642-01084-2, pp. 101-128, 2009.
18. Hongbo Liu and *Ajith Abraham* , Chaos and Swarm Intelligence, **Intelligent Computing Based on Chaos**, Ljupco Kocarev et al. (Eds.), Studies in Computational Intelligence, Springer Verlag, Germany, SCI 184, pp. 197-212, 2009.
19. Vaclav Snasel, *Ajith Abraham* , Jan Platos and Pavel Kromer, Designing Light Weight Intrusion Detection Systems: Non-negative Matrix Factorization Approach, **Socioeconomic and Legal Implications of Electronic Intrusion**, Politis et al. (Eds.), Idea Group Inc. Publishers, USA, pp. 217-230, 2009.
20. Hongbo Liu, *Ajith Abraham* and Youakim Badr, Neighbor Selection in Peer-to-Peer Overlay Networks: A Swarm Intelligence Approach, **Pervasive Computing : Innovations in Intelligent Multimedia and Applications**, Series in Computer Communications and Networks, Springer Verlag, Germany, ISBN 978-1-84882-598-7, pp. 405-431, 2009.
21. Animesh Trivedi, Rajan Arora, Rishi Kapoor, Sudip Sanyal, *Ajith Abraham* and Sugata Sanyal, Mobile Ad Hoc Network Security Vulnerabilities, **Encyclopedia of Information Science and Technology**, Idea Group Inc. Publishers, USA, 2009.
22. Cristian Pinzon, Yanira De Paz, Javier Bajo, *Ajith Abraham* and Juan M. Corchado, SiC: An agent based architecture for preventing and detecting attacks to ubiquitous databases, **Pervasive Computing : Innovations in Intelligent Multimedia and Applications**, Series in Computer Communications and Networks, Springer Verlag, Germany, ISBN 978-1-84882-598-7, pp. 231-258, 2009.
23. Juan Fraile, Javier Bajo, *Ajith Abraham* and Juan Corchado, HoCa: Hybrid Multiagent Architecture for Home Care, **Pervasive Computing : Innovations in Intelligent Multimedia and Applications**, Series in Computer Communications and Networks, Springer Verlag, Germany, ISBN 978-1-84882-598-7, pp. 259-285, 2009.
24. Hameed Al-Qaheri, Aboul Ella Hassanien and *Ajith Abraham* , A Generic Scheme for Generating Prediction Rules Using Rough Set, **Rough Set Theory: A True Landmark in Data Analysis**, Studies in Computational Intelligence, Springer Verlag, Germany, ISBN 978-3-540-89920-4, pp. 163-186, 2009.
25. Hongbo Liu, *Ajith Abraham* and Yanheng Li, Nature Inspired Population-based Heuristics for Rough Set Reduction, **Rough Set Theory: A True Landmark in Data Analysis**, Studies in Computational Intelligence, Springer Verlag, Germany, ISBN 978-3-540-89920-4, pp. 261-278, 2009.
26. Sarina Sulaiman, Siti Mariyam Shamsuddin and *Ajith Abraham* , Rough Web Caching, **Rough Set Theory: A True Landmark in Data Analysis**, Studies in Computational Intelligence, Springer Verlag, Germany, ISBN 978-3-540-89920-4, pp. 187-211, 2009.
27. Aboul ella Hassanien, *Ajith Abraham* , James Peters and Janusz Kacprzyk, Rough Sets in Medical Imaging: Foundations and Trends, **Computational Intelligence in Medical Imaging: Techniques and Applications**, G. Schaefer et al. (Eds.), CRC Press, USA, Chapter 3, pp. 47-87, 2008.
28. *Ajith Abraham* and Crina Grosan, Pharmaceutical Drug Design Using Dynamic Connectionist Ensemble Networks, **Communications and Discoveries from Multidisciplinary Data**, Studies in Computational Intelligence, Springer Verlag, Germany, Vol. 123, Iwata S. et al (Eds.), ISBN: 978-3-540-78732-7, pp. 221-231, 2008.

29. Aboul ella Hassanien, *Ajith Abraham* , Janusz Kacprzyk and James Peters, Computational Intelligence in Multimedia Processing: Foundations and Trends, **Computational Intelligence in Multimedia Processing: Recent Advances**, Aboul-Ella Hassanien et al. (Eds.), Springer Verlag, Germany, ISBN: 978-3-540-76826-5, pp. 3-49, 2008.
30. Arijit Bhattacharya, *Ajith Abraham* and Pandian Vasant, Flexible Manufacturing System Selection under Disparate Level-of-Satisfaction of Decision Maker using Intelligent Fuzzy - Multi Criteria Decision Making Model, **Fuzzy Multi-Criteria Decision Making: Theory and Applications with Recent Developments**, Cengiz Kahraman (Ed.), Springer Optimization and its Applications, Springer Verlag, Germany, ISBN 978-0-387-76812-0, pp. 263-280, 2008.
31. Pandian Vasant, Arijit Bhattacharya and *Ajith Abraham* , Measurement of Level-of-Satisfaction of Decision Maker in Intelligent Fuzzy– Multi Criteria Decision Making Theory: A Generalized Approach, **Fuzzy Multi-Criteria Decision Making: Theory and Applications with Recent Developments**, Cengiz Kahraman (Ed.), Springer Optimization and its Applications, Springer Verlag, Germany, ISBN 978-0-387-76812-0, pp. 235-261, 2008.
32. *Ajith Abraham* , Pandian Vasant and Arijit Bhattacharya, Neuro-fuzzy Approximation to Multi-Criteria Decision Making Quality Function Deployment Methodology, **Fuzzy Multi-Criteria Decision Making: Theory and Applications with Recent Developments**, Cengiz Kahraman (Ed.), Springer Optimization and its Applications, Springer Verlag, Germany, ISBN 978-0-387-76812-0, pp. 301-321, 2008.
33. Aboul ella Hassanien, Mariofanna Milanova, Tomasz Smolinski and *Ajith Abraham* , Computational Intelligence in Solving Bioinformatics Problems: Reviews, Perspectives and Challenges, **Computational Intelligence in Biomedicine and Bioinformatics**, Studies in Computational Intelligence, SCI 151, Springer Verlag, Germany, ISBN 978-3-540-70776-9, pp. 3-47, 2008.
34. *Ajith Abraham* , Hongbo Liu and Mingyan Zhao, Particle Swarm Scheduling for Work-Flow Applications in Distributed Computing Environments, **Metaheuristics for Scheduling: Industrial and Manufacturing Applications**, Studies in Computational Intelligence, Springer Verlag, Germany, ISBN 978-3-540-78984-0, pp. 327-342, 2008.
35. *Ajith Abraham* , Hongbo Liu, Crina Grosan and Fatos Xhafa, Nature Inspired Metaheuristics for Grid Scheduling: Single and Multiobjective Optimization Approaches, **Metaheuristics for Scheduling: Distributed Computing Environments**, Studies in Computational Intelligence, Springer Verlag, Germany, ISBN: 978-3-540-69260-7, pp. 247-272, 2008.
36. Hongbo Liu, *Ajith Abraham* and Fatos Xhafa, Peer-to-Peer Neighbor Selection Using Single and Multiobjective Population-based Metaheuristics, **Metaheuristics for Scheduling: Distributed Computing Environments**, Studies in Computational Intelligence, Springer Verlag, Germany, ISBN: 978-3-540-69260-7, pp. 323-340, 2008.
37. Fatos Xhafa, Enrique Alba, Bernabe Dorronsoro, Bernat Duran and *Ajith Abraham* , Efficient Batch Job Scheduling in Grids Using Cellular Memetic Algorithms, **Metaheuristics for Scheduling: Distributed Computing Environments**, Studies in Computational Intelligence, Springer Verlag, Germany, ISBN: 978-3-540-69260-7, pp. 273-299, 2008.
38. Fatos Xhafa and *Ajith Abraham* , Meta-heuristics for Grid Scheduling Problems, **Metaheuristics for Scheduling: Distributed Computing Environments**, Studies in Computational Intelligence, Springer Verlag, Germany, ISBN: 978-3-540-69260-7, pp. 1-37, 2008.
39. Swagatam Das, *Ajith Abraham* and Amit Konar, Particle Swarm Optimization and Differential Evolution Algorithms: Technical Analysis, Applications and Hybridization Perspectives, **Advances of Computational Intelligence in Industrial Systems**, Ying Liu et al. (Eds.), Studies in Computational Intelligence, Springer Verlag, Germany, ISBN 978-3-540-78296-4, pp. 1-38, 2008.
40. *Ajith Abraham* , Swagatam Das and Sandip Roy, Data Clustering Using Swarm Intelligence Algorithms, **Soft Computing for Knowledge Discovery and Data Mining**, Oded Maimon and Lior Rokach (Eds.), Springer Verlag, Germany, ISBN 978-0-387-69934-9, pp. 279-313, 2007.

41. *Ajith Abraham* and Crina Grosan, Engineering Evolutionary Intelligent Algorithms: Methodologies, Architectures and Reviews, **Engineering Evolutionary Intelligent Algorithms**, Grosan C. et al. (Eds.), Studies in Computational Intelligence, Springer Verlag, Germany, ISBN 978-3-540-75395-7, pp. 1-22, 2008.
42. Swagatam Das, *Ajith Abraham* and Amit Konar, Swarm Intelligence Algorithms in Bioinformatics, **Computational Intelligence in Bioinformatics**, Arpad Kelemen et al. (Eds.), Springer Verlag, Germany, ISBN: 978-3-540-76802-9, pp. 113-147, 2008.
43. Dong-Hwa Kim and *Ajith Abraham* , A Hybrid Genetic Algorithm and Bacterial Foraging Approach for Global Optimization and Robust Tuning of PID Controller with Disturbance Rejection, **Hybrid Evolutionary Algorithms**, C. Grosan et al. (Eds.), Studies in Computational Intelligence, Vol. 75, Springer Verlag, Germany, ISBN 978-3-540-73296-9, pp. 171-199, 2007.
44. Dong-Hwa Kim, *Ajith Abraham* and Kaoru Hirota, Hybrid Genetic Algorithm- Particle Swarm Approach for Function Optimization, **Hybrid Evolutionary Algorithms**, C. Grosan et al. (Eds.), Studies in Computational Intelligence, Vol. 75, Springer Verlag, Germany, ISBN 978-3-540-73296-9, pp. 147-170, 2007.
45. Crina Grosan and *Ajith Abraham* , Hybrid Evolutionary Algorithms: Methodologies, Architectures and Reviews, **Hybrid Evolutionary Algorithms**, C. Grosan et al. (Eds.), Studies in Computational Intelligence, Vol. 75, Springer Verlag, Germany, ISBN 978-3-540-73296-9, pp. 1-17, 2007.
46. Crina Grosan, *Ajith Abraham* and Monica Chis, Swarm Intelligence in Data Mining, **Swarm Intelligence and Data Mining**, A. Abraham, C. Grosan and V. Ramos (Eds.), Studies in Computational Intelligence, Springer Verlag, Germany, ISBN 3-540-34955-3, pp. 1-20, 2006.
47. Crina Grosan and *Ajith Abraham* , Stigmergic Optimization: Inspiration, Technologies and Perspectives, **Stigmergic Optimization**, A. Abraham, C. Grosan and V. Ramos (Eds.), Studies in Computational Intelligence, Springer Verlag, Germany, ISBN: 3-540-34689-9, pp. 1-24, 2006.
48. *Ajith Abraham* , He Guo and Hongbo Liu, Swarm Intelligence: Foundations, Perspectives and Applications, **Swarm Intelligent Systems**, Nadia Nedjah and Luiza Mourelle (Eds.), Studies in Computational Intelligence, Springer Verlag Germany, pp. 3-25, 2006.
49. *Ajith Abraham* , Nadia Nedjah, and Luiza Mourelle, Evolutionary Computation: From Genetic Algorithms to Genetic Programming, **Genetic Systems Programming**, Nadia Nedjah et al. (Eds.), Studies in Computational Intelligence, Springer Verlag Germany, ISBN: 3-540-29849-5, pp. 1-20, 2006.
50. *Ajith Abraham* and Crina Grosan, Evolving Intrusion Detection Systems, **Genetic Systems Programming**, Nadia Nedjah et al. (Eds.), Studies in Computational Intelligence, Springer Verlag Germany, ISBN: 3-540-29849-5, pp. 57-79, 2006.
51. Crina Grosan and *Ajith Abraham* , Stock Market Modeling Using Genetic Programming Ensembles, **Genetic Systems Programming**, Nadia Nedjah et al. (Eds.), Studies in Computational Intelligence, Springer Verlag Germany, ISBN: 3-540-29849-5, pp. 131-146, 2006.
52. Yuehui Chen and *Ajith Abraham* , Hybrid Learning Methods for Stock Index Modeling, **Artificial Neural Networks in Finance, Health and Manufacturing: Potentials and Challenges**, J. Kamruzzaman, R. K. Begg and R. A. Sarker (Eds.), Idea Group Inc. Publishers, USA, pp. 63-78, 2006.
53. Srinivas Mukkamala, Andrew Sung, *Ajith Abraham* and Vitorino Ramos, Intrusion Detection Systems Using Adaptive Regression Splines, **Enterprise Information Systems VI** , Seruca, I.; Cordeiro, J.; Hammoudi, S.; Filipe, J. (Eds.) Springer-Verlag, The Netherlands, ISBN: 1-4020-3674-4 , pp. 211-218, 2006.
54. Cong Tran, *Ajith Abraham* and Lakhmi Jain, Soft Computing Paradigms for Modeling Decision Support Systems, **Advances in Applied Artificial Intelligence**, John Fulcher (Ed.), Idea Group Inc. Publishers, USA, ISBN 159140827X, pp. 1-28, 2005.

55. Srinivas Mukkamala, Andrew Sung and *Ajith Abraham* , Cyber Security Challenges: Designing Efficient Intrusion Detection Systems and Antivirus Tools, **Enhancing Computer Security with Smart Technology**, V. Rao Vemuri (Ed.), CRC Press, USA, ISBN 0849330459, pp. 125 -161, 2005.
56. *Ajith Abraham* , Hybrid Intelligent Systems: Evolving Intelligence in Hierarchical Layers, **Do Smart Adaptive Systems Exist? Best Practice for Selection and Combination of Intelligent Methods**, Bogdan Gabrys, Kauko Leiviska and Jens Strackeljan (Eds.), Studies in Fuzziness and Soft Computing, Vol. 173, Springer Verlag Germany, ISBN: 3-540-24077-2, Chapter 8, pp. 159-169, 2005.
57. *Ajith Abraham* and Ravi Jain, Soft Computing Approach for Modeling Intrusion Detection Systems, **Classification and Clustering for Knowledge Discovery**, Saman Halgamuge and Lipo Wang (Eds.), Studies in Computational Intelligence, Vol. 4 , Springer Verlag Germany, ISBN: 3-540-26073-0, Chapter 13, pp. 187-204, 2005.
58. Xiaozhe Wang, *Ajith Abraham* and Kate A. Smith, Soft Computing Paradigms for Web Access Pattern Analysis, **Soft Computing in Knowledge Discovery Methods and Applications**, Saman Halgamuge and Lipo Wang (Eds.), Studies in Computational Intelligence, Vol. 4, Springer Verlag Germany, ISBN: 3-540-26073-0, Chapter 15, pp. 231-248, 2005.
59. *Ajith Abraham* and Lakhmi Jain, Evolutionary Multiobjective Optimization, **Evolutionary Multiobjective Optimization: Theoretical Advances and Applications**, Abraham A., Jain L.C. and Goldberg R. (Eds.), Springer Verlag, London, Chapter 1, pp. 1-9, 2005.
60. Andy Auyeung and *Ajith Abraham* , Role of Simulated Evolution in Bioinformatics, **Evolutionary Machine Design: Methodology and Applications**, Nadia Nedjah and Luiza Mourelle (Eds.), Nova Publishers, USA, ISBN: 1-59454-405-0, Chapter 4, pp. 197-219, 2005.
61. *Ajith Abraham* and Johnson Thomas, Distributed Intrusion Detection Systems: A Computational Intelligence Approach, **Applications of Information Systems to Homeland Security and Defense**, Abbass H.A. and Essam D. (Eds.), Idea Group Inc. Publishers, USA, Chapter 5, pp. 105-135, 2005.
62. *Ajith Abraham* , Hybrid Soft and Hard Computing Based Forex Monitoring Systems, **Fuzzy System Engineering: Theory and Practice**, Nadia Nedjah et al. (Eds.), Studies in Fuzziness and Soft Computing, Springer Verlag Germany, ISBN 3-540-25322-X, Chapter 6, pp. 113- 129, 2005.
63. *Ajith Abraham* , Adaptation of Fuzzy Inference System Using Neural Learning, **Fuzzy System Engineering: Theory and Practice**, Nadia Nedjah et al. (Eds.), Studies in Fuzziness and Soft Computing, Springer Verlag Germany, ISBN 3-540-25322-X, Chapter 3, pp. 53-83, 2005.  
*Ajith Abraham* , Nature and Scope of AI Techniques, **Handbook for Measurement Systems Design**, Peter Sydenham and Richard Thorn (Eds.), John Wiley and Sons Ltd., London, ISBN 0-470-02143-8, pp. 893-900, 2005.
64. *Ajith Abraham* , Artificial Neural Networks, **Handbook for Measurement Systems Design**, Peter Sydenham and Richard Thorn (Eds.), John Wiley and Sons Ltd., London, ISBN 0- 470-02143-8, pp. 901-908, 2005.
65. *Ajith Abraham* , Rule Based Expert Systems, **Handbook for Measurement Systems Design**, Peter Sydenham and Richard Thorn (Eds.), John Wiley and Sons Ltd., London, ISBN 0- 470-02143-8, pp. 909-919, 2005.
66. *Ajith Abraham* , Evolutionary Computation, **Handbook for Measurement Systems Design**, Peter Sydenham and Richard Thorn (Eds.), John Wiley and Sons Ltd., London, ISBN 0- 470-02143-8, pp. 920-931, 2005.
67. *Ajith Abraham* , World Wide Web Usage Mining, **Computationally Intelligent Hybrid Systems: The Fusion of Soft Computing and Hard Computing**, Seppo Ovaska (Ed.), John Wiley and Sons Inc. and IEEE Press, ISBN 0471476684, Chapter 11, pp. 363 -396, 2004.
68. *Ajith Abraham* , Evolutionary Computation in Intelligent Web Management, **Evolutionary Computing in Data Mining**, Ashish Ghosh and Lakhmi Jain (Eds.), Studies in Fuzziness

and Soft Computing, Springer Verlag Germany, ISBN 3540223703, Chapter 8, pp. 189-210, 2004.

69. *Ajith Abraham*, Web Usage Mining: Business Intelligence from Web Logs, **Computational Web Intelligence: Intelligent Technology for Web Applications**, Yanqing Zhang, Abraham Kandel, T.Y. Lin and Yiji Yao (Eds.), ISBN 9812388273, World Scientific Publishing Co, Singapore, Chapter 12, pp. 229-256, 2004.
70. *Ajith Abraham* and Muhammad Riaz Khan, Neuro-Fuzzy Paradigms for Intelligent Energy Management, **Innovations in Intelligent Systems: Design, Management and Applications**, Abraham A., Jain L. and Jan van der Zwaag B. (Eds.), Studies in Fuzziness and Soft Computing, Springer Verlag Germany, ISBN 354020265X, Chapter 12, pp. 285-314, 2003.
71. *Ajith Abraham*, Intelligent Systems: Architectures and Perspectives, **Recent Advances in Intelligent Paradigms and Applications**, Abraham A., Jain L. and Kacprzyk J. (Eds.), Studies in Fuzziness and Soft Computing, Springer Verlag Germany, ISBN 3790815381, Chapter 1, pp. 1-35, 2002.

#### EDITED VOLUMES

##### Edited Conference Proceedings

1. Suresh Satapathy, Avadhani Chandra and *Ajith Abraham*, Proceedings of the International Conference on Information Systems Design and Intelligent Applications (India 2012), Visakhapatnam, India, Springer Verlag, Advances in Intelligent and Soft Computing, Volume 132, ISBN 978-3-642-27442-8, XXII, 954 pages, 2012.
2. *Ajith Abraham*, Dharma Agrawal, Siby Abraham, Emilio Corchado, Preeti Bajaj, Geetam Tomar, Proceedings of the World Congress on Information and Communication Technologies (WICT 2011), Mumbai, India, ISBN 978-1-4673-0125-1, IEEE, 2011.
3. Sebastin Ventura, *Ajith Abraham*, Krzysztof Cios, Cristbal Romero, Francesco Marcelloni, Jos Manuel Bentez, Eva Gibaja, Proceedings of the 11th International Conference on Intelligent Systems Design and Applications (ISDA 2011), Crdoba, Spain, ISBN 978-1-4577-1675-1, IEEE, 2011.
4. *Ajith Abraham*, Daniel Zeng, Dharma Agrawal, Mohd Faizal Abdollah, Emilio Corchado, Valentina Casola, Choo Yun Huoy, Proceedings of the 7th International Conference on Information Assurance and Security (IAS), Malacca, Malaysia, ISBN: 978-1-4577-2153-3, IEEE, 2011.
5. *Ajith Abraham*, Mohamed Kamel, Ronald Yager, Albert Zomaya, Azah Kamilah Muda, Tzung-Pei Hong, Choo Yun Huoy, Proceedings of the Eleventh International Conference on Hybrid Intelligent Systems (HIS), Malacca, Malaysia, IEEE, ISBN:978-1-4577-2150-2, 2011.
6. *Ajith Abraham*, Emilio Corchado, Redda Alhaj, Vaclav Snasel, International Conference on Computational Aspects of Social Networks (CASoN), Salamanca, Spain, IEEE, ISBN 978-1-4577-1131-2, 2011.
7. *Ajith Abraham*, Emilio Corchado, Robert Berwick, Andre de Carvalho, Albert Zomaya and Ronald Yager, Third World Congress on Nature and Biologically Inspired Computing (NaBIC 2011), Salamanca, Spain, IEEE, ISBN 978-1-4577-1123-7, 2011.
8. *Ajith Abraham*, Emilio Corchado, Sang-Yong Han, Weisen Guo, Juan Corchado, Athanasios Vasilakos, 7th International Conference on Next Generation Web Services Practices (NWeSP 11), ISBN 978-1-4577-1126-8, 2011.
9. *Ajith Abraham*, Hongbo Liu, Fuchun Sun, Chen Guo, Sen McLoone and Emilio Corchado, International Conference of Soft Computing and Pattern Recognition (SoCPaR), Dalian, China, IEEE, ISBN 978-1-4577-1194-7, 2011.
10. *Ajith Abraham*, Juan Corchado, Sara Rodriguez Gonzalez and Juan De Paz Santana, International Symposium on Distributed Computing and Artificial Intelligence (DCAI 2011), Springer Verlag, Advances in Soft Computing Series, Germany, ISBN 978-3-642-19933-2, 2011.

11. *Ajith Abraham* , Jaime Lloret Mauri, John Buford, Junichi Suzuki and Sabu Thampi, Proceedings of the First International Conference on Advances in Computing and communications (ACC 2011),Springer Verlag, Series in Communications in Computer and Information Science, Kochi, India, Parts 1-4, ISBN 978-3-642-22708-0, ISBN 978-3-642-22713-4,ISBN 978-3-642-22719-6 and ISBN 978-3-642-22725-7, 2011.
12. David Al-Dabass, Suwarno, Jasmy Yunus, Ismail Saad, Dayu Giriantari, *Ajith Abraham* , Third International Conference on Computational Intelligence, Communication Systems and Networks (CICSyN 2011), Bali, Indonesia, IEEE, ISBN ISBN 978-1-4577-0975-3, 2011.
13. David Al-Dabass, Jasmy Yunus, Azian Azamimi, Sazali Yaakob, Zuwairie Ibrahim and *Ajith Abraham* , Third International Conference on Computational Intelligence, Modelling Simulation (CIMSIm 2011), Langkawi, Malaysia, IEEE Computer Society, ISBN: 978-0-7695-4562-2, 2011.
14. David Al-Dabass, Joel Joseph Marciano, Joy Reyes-Madamba, Jasmy Yunus, Zuwairie Ibrahim and *Ajith Abraham* , Fifth Asia Modelling Symposium (AMS 2011), Manila, Philippines, IEEE Computer Society, ISBN: 978-0-7695-4414-4, 2011.
15. David Al-Dabass, Alessandra Orsoni, Richard Cant and *Ajith Abraham* , UKSim 13th International Conference on Computer Modelling and Simulation (UKSim 2011), Cambridge, United Kingdom, IEEE Computer Society, ISBN 978-0-7695-4376-5, 2011.
16. David Al-Dabass, Chhiv Eav Lav, Des Phal, Marry Kong, Jasmy Yunus, Zuwairie Ibrahim and *Ajith Abraham* , Second International Conference on Intelligent Systems, Modelling and Simulation (ISMS 2011), Phnom Penh, Cambodia, IEEE Computer Society, ISBN: 978-0-7695-4336-9, 2011.
17. *Ajith Abraham* , Proceedings of the Fifth European Conference on Data Mining (ECDM 2011), Rome, Italy, ISBN, 2011.
18. Geetam Tomar, *Ajith Abraham* , Deepak Bhatnagar and Amit Pandit,International Conference on Communication Systems and Network Technologies (CSNT 2011), India, IEE, ISBN 978-0-7695-4437-3, 2011.
19. Marek Babiuch, Pavel Smutny, Renata Wagnerova, *Ajith Abraham* , Vaclav Snasel and Radim Farana, 12th International Carpathian Control Conference (ICCC 2011), IEEE, USA, ISBN 978-1-61284-359-9, 2011.
20. *Ajith Abraham* , 4th European Conference on Data Mining (ECDM 2010), Freiburg, Germany, ISBN 978-972-8939-23-6, Portugal, 2010.
21. Piyush Trivedi, Geetam Tomar, *Ajith Abraham* and Sanjay Silakari, International Conference on Computational Intelligence and Communication Networks (CICN 2010), IEEE Computer Society Press, USA, ISBN: 978-0-7695-4254-6, 2010.
22. Hideyuki Takagi, *Ajith Abraham* , Mario Kppen, Kaori Yoshida and Andr de Carvalho, Proceedings of the Second World Congress on Nature and Biologically Inspired Computing (NaBIC 2010), Japan, IEEE, USA, ISBN 978-1-4244-7376-2, 2010.
23. Aboul Ella Hassanien, *Ajith Abraham* , Michela Antonelli, Hani Hagra, Tzung-Pei Hong and Francesco Marcelloni, 10th International Conference on Intelligent Systems design and Applications (ISDA 2010), IEEE USA, ISBN 978-1-4244-8136-1, 2010.
24. *Ajith Abraham* , Preeti Bajaj, Amol Deshmukh, Santosh Jaju, Kantilal Joshi, 3rd international Conference on Emerging trends in Engineering and Technology (ICETET10), IEEE Computer Society Press, USA, ISBN 978-0-7695-4246-1, 2010.
25. *Ajith Abraham* , Geetam Tomar, Srinivas Padmanabhuni, Vaclav Snasel and Preeti Bajaj, Sixth International Conference on Next Generation Web Services Practices (NWeSP 2010), Gwalior, India, IEEE, ISBN 978-1-4244-7816-3, 2010.
26. Trevor Martin, Azah Kamilah Muda, *Ajith Abraham* , Henri Prade, Anne Laurent, Dominique Laurent and Virginie Sans, Second International Conference on Soft Computing and Pattern Recognition (SoCPaR 2010), IEEE, USA, ISBN 978-1-4244-7896-5, 2010.

27. David Al-Dabass, Alessandra Orsoni, Athanasios Pantelous, Marco Vannucci and *Ajith Abraham*, UKSim Fourth European Modelling Symposium on Computer Modelling and Simulation, IEEE Computer Society Press, USA, ISBN 978-0-7695-4308-6, 2010.
28. David Al-Dabass, Suwarno Suwarno, Jasmy Yunus, Ismail Saad, Dayu Giriantari and *Ajith Abraham*, Second International Conference on Computational Intelligence, Modelling and Simulation (CIMSIm 2010), IEEE Computer Society Press, USA, ISBN 978-0-7695-4262-1, 2010.
29. Fatos Xhafa, Stavros Demetriadis, Santi Caball and *Ajith Abraham*, The International Conference on Intelligent Networking and Collaborative Systems (INCoS 2010), Thessaloniki, Greece, IEEE Computer Society Press, USA, ISBN 978-0-7695-4278-2, 2010.
30. *Ajith Abraham*, Khalid Saeed and Vaclav Snasel, 9th International Conference on Computer Information Systems and Industrial Management Applications (CISIM 2010), IEEE, ISBN 978-1-4244-7816-3, 2010.
31. Jianchao Zeng, Jeng-Shyang Pan and *Ajith Abraham*, International Conference on Computational Aspects of Social Networks (CASoN 2010), China, IEEE Computer Society Press, USA, ISBN 978-0-7695-4202-7, 2010.
32. Mario Koeppen, Andr de Carvalho, *Ajith Abraham* and Ashraf Saad, The Tenth International Conference on Hybrid Intelligent Systems (HIS 2010), Atlanta, USA IEEE, ISBN 978-1-4244-7364-9, 2010.
33. *Ajith Abraham*, Ashraf Saad, Huirong Fu, Daniel Zeng, Emilio Corchado and Dharma Agrawal, The Sixth International Conference on Information Assurance and Security (IAS 2010), Atlanta, USA, IEEE, ISBN 978-1-4244-7408-0, 2010.
34. Athanasios Pantelous, Alessandra Orsoni, David Al-Dabass and *Ajith Abraham*, Second International Conference on Computational Intelligence, Communication Systems and Networks, CICSyN 2010, ISBN-13: 978-0-7695-4158-7, IEEE Computer Society press, USA, 2010.
35. David Al-Dabass, Alessandra Orsoni, Richard Cant and *Ajith Abraham*, **12th International Conference on Computer Modelling and Simulation Cambridge (UKSIM 2010)**, United Kingdom, ISBN 978-0-7695-4016-0, IEEE Computer Society Press, USA, 2010.
36. David Al-Dabass, Jasmy Yunus, Zuwairie Ibrahim, Rosalam Sarbatly, Adam Brentnall and *Ajith Abraham*, **Fourth International Conference on Modeling and Simulation (AMS 2010)**, IEEE Computer Society Press, USA, ISBN 978-0-7695-4062-7, 2010.
37. David Al-Dabass, Athanasios Pantelous, Hissam Tawfik, Atulya Nagar, *Ajith Abraham* and Richard Zobel, **UKSim First International Conference on Intelligent Systems, Modeling and Simulation (ISMS 2010)**, Liverpool, UK, IEEE Computer Society, USA, ISBN 978-0-7695-3973-7, 2010.
38. *Ajith Abraham*, Andre Carvalho, Francisco Herrera and Vijayalakshmi Pai, **World Congress on Nature and Biologically Inspired Computing (NaBIC 2009)**, India, IEEE Press, ISBN 978-1-4244-5612-3, 2009.
39. *Ajith Abraham*, Azah Mudah, Nana Herman, Siti Shamsuddin and Yun-Huoy Choo, **International Conference on Softcomputing and Pattern Recognition (SoCPaR 2009)**, IEEE Computer Society, USA, ISBN 978-0-7695-3879-2, 2009.
40. *Ajith Abraham*, Jose Manuel Benitez, Francisco Herrera, Vincenzo Loia, Francesco Marcelloni, Sabrina Senatore, **9th international Conference on Intelligent Systems design and Applications (ISDA 2009)**, IEEE Computer Society Press, USA, ISBN 978-0-7695-3872-3, 2009.
41. David Al-Dabass, Sokratis Katsikas, Ioannis Koukos, *Ajith Abraham* and Richard Zobel, **2009 Third UKSim European Modeling Symposium on Computer Modeling and Simulation (EMS 2009)**, Greece, IEEE Computer Society, USA, ISBN-13: 978-0-7695-3886-0, 2009.
42. Youakim Badr, Santi Caballe, Fatos Xhafa, *Ajith Abraham* and Begoa Gros, **International Conference on Intelligent Networking and Collaborative Systems (INCoS 2009)**, Barcelona, Spain, IEEE Computer Society Press, USA, ISBN 978-0-7695-3858-7, 2009.

43. Jiri Kunovsky, Petr Han?ek, Franti?ek Zboil, David Al-Dabass and *Ajith Abraham* , ***Conference on Computer Modeling and Simulation (CSSim 2009)***, Brno, Czech Republic, IEEE Computer Society Press, USA, ISBN 978-0-7695-3795-5, 2009.
44. David Al-Dabass, Geetam Tomar, Rajeev Tripathi and *Ajith Abraham* , ***International Conference on Computational Intelligence, Communication Systems and Networks (CICSyN 2009)***, IEEE Computer Society Press, USA, ISBN 978-0-7695-3743-6, 2009.
45. *Ajith Abraham* , ***3rd European Conference on Data Mining (ECDM 2009)***, Algarve, Portugal, ISBN 978-972-8924-88-1, IADIS Press, Lisbon, Portugal, 2009.
46. Jeng-Shyang Pan, Jie Liu, and *Ajith Abraham* , ***The Ninth International Conference on Hybrid Intelligent Systems (HIS 2009)***, Shengyang, China, IEEE Computer Society press, USA, ISBN 978-0-7695-3475-0, 2009.
47. Jeng-Shyang Pan, Bao-Long Guo and *Ajith Abraham* , ***The Fifth International Conference on Information Assurance and Security (IAS 2009)***, Xi'An, China, IEEE Computer Society Press, USA, ISBN 978-0-7695-3744-3, 2009.
48. *Ajith Abraham* , Dusan Husek and Vaclav Snasel, ***Proceedings of the Fifth International Conference on Next Generation Web Services Practices (NWeSP 2009)***, Prague, Czech Republic, IEEE Computer Society Press, USA, ISBN 978-0-7695-3821-1, 2009.
49. Vaclav Snasel, Piotr S. Szczepaniak, *Ajith Abraham* and Janusz Kacprzyk, ***Proceedings of the 6th Atlantic web Intelligence Conference - AWIC'2009***, Prague, Czech Republic, September, 2009.
50. *Ajith Abraham* , Vaclav Snasel and Katarzyna Wegrzyn-Wolska, ***International Conference on Computational Aspects of Social Networks (CASoN 2009)***, France, IEEE Computer Society Press, USA, ISBN-13: 978-0-7695-3740-5, 2009.
51. David Al-Dabass, Robertus Triweko, Sani Susanto, *Ajith Abraham* , ***Third International Conference on Modeling and Simulation, (AMS 2009)***, IEEE Computer Society Press, USA, ISBN 978-0-7695-SBN 978-0-7695-3648-4, 2009 (Table of contents).
52. Khalid Saeed, *Ajith Abraham* , Piotr Porwik, ***International Conference on Biometrics and Kansei Engineering (ICBAKE 2009)***, Poland, IEEE Computer Society Press, USA, ISBN-13: 978-0-7695-3692-7, 2009.
53. David Al-Dabass, Alessandra Orsoni, Adam Brentnall, *Ajith Abraham* and Richard Zobel, ***Proceedings of UKSim - Eleventh International Conference***, University of Cambridge, UK, IEEE Computer Society Press, ISBN 978-0-7695-3593-7, 2009.
54. Preeti Bajaj and *Ajith Abraham* , ***Proceedings of the International Workshop on Machine Intelligence Research (MIR Day 2009)***, Nagpur, India, ISBN 978-81-8465-033-4, 2009.
55. Pit Pitchappan and *Ajith Abraham* , ***Proceedings of the IEEE Third International Conference on Digital Information Management (ICDIM 2008)***, London, IEEE Press, USA, ISBN 978-1-4244-2917-2, 2008.
56. Jeng-Shyan Pan, *Ajith Abraham* and Chin-Chen Chang, ***Proceedings of the Eighth International Conference on Intelligent Systems Design and Applications (ISDA'08)***, Kaohsiung, Taiwan, IEEE Computer Society Press, USA, ISBN 978-0-7695-3382-7, 2008.
57. Richard Chbeir, Youakim Badr, *Ajith Abraham* , Dominique Laurent and Fernando Ferri, ***Proceedings of the IEEE/ACM International Conference on Soft Computing as Transdisciplinary Science and Technology (CSTST 2008)***, Paris, France, ACM Press, ISBN 978-1-60558-046-3, 2008.
58. *Ajith Abraham* and Sangyong Han, ***Proceedings of the Fourth International Conference on Next Generation Web Services Practices, NWeSP 2008***, IEEE Computer Society Press, USA, ISBN 978-0-7695-3455-8, 2008
59. Fatos Xhafa, Francisco Herrera, *Ajith Abraham* , Mario Koeppen, Jose Manuel Benitez, ***Proceedings of The Eighth International Conference on Hybrid Intelligent Systems, HIS 2008***, Barcelona, Spain, IEEE Computer Society press, USA, ISBN 978-0-7695-3326-1, 2008.

60. Emilio Corchado, *Ajith Abraham* and Witold Pedrycz, **Proceedings of The 3rd International Workshop on Hybrid Artificial Intelligence Systems**, Burgos Spain, Lecture notes in Computer Science, Springer Verlag, Lecture notes in Artificial Intelligence, LNAI 5271, Springer Verlag, Germany, ISBN 3-540-87655-3, 2008.
61. Hans Weghorn and *Ajith Abraham* , **Proceedings of the 2nd European Conference on Data Mining, ECDM 2008**, Amsterdam, Netherlands, ISBN 978-972-8924-63-8, IADIS Press, Lisbon, Portugal, 2008.
62. David Al-Dabass, Atulya Nagar, Hissam Tawfik, *Ajith Abraham* and Richard Zobel, **Second UKSIM European Symposium on Computer Modeling and Simulation, EMS 2008**, IEEE Computer Society Press, USA, ISBN 978-0-7695-3325-4, 2008.
63. Massimiliano Rak, *Ajith Abraham* and Valentina Casola, **Proceedings of The Fourth International Symposium on Information Assurance and Security, IAS 2008**, Napoli, Italy, IEEE Computer Society press, USA, ISBN 978-0-7695-3324-7, 2008.
64. Vaclav Snasel, *Ajith Abraham* , Khalid Saeed and Jaroslav Pokorny, **Proceedings of 7th International Conference on Computer Information Systems and Industrial Management Applications, CISIM 2008**, IEEE Computer Society press, USA, ISBN 978-0-7695-3184-7, 2008.
65. David Al-Dabass, Steve Turner, Gary Tan, *Ajith Abraham* , **Proceedings of Second Asia International Conference on Modeling and Simulation, AMS 2008**, IEEE Computer Society Press, USA, ISBN 0-7695-3114-8, 2008.
66. Alessandra Orsoni, Adam Brentnall, David Al-Dabass, *Ajith Abraham* and Richard Zobel, **Proceedings of UKSIM - Tenth International Conference, University of Cambridge**, UK, IEEE Computer Society Press, ISBN 0-7695-3114-8, 2008.
67. Luiza Mourelle, Nadia Nedjah, Janusz Kacprzyk and *Ajith Abraham* , **Proceedings of the Seventh International Conference on Intelligent Systems Design and Applications (ISDA'07)**, IEEE Computer Society Press, ISBN 07695-2976-3, USA, 2007.
68. *Ajith Abraham* and Sangyong Han, **Proceedings of the Third International Conference on Next Generation Web Services Practices - NWeSP 2007**, IEEE Computer Society Press, USA, ISBN-10: 0-7695-3022-2, 2007.
69. Andreas König, Mario Köppen, *Ajith Abraham* , Christian Igel and Nikola Kasabov, **Proceedings of the Seventh International Conference on Hybrid Intelligent Systems - HIS 2007**, Germany, IEEE Computer Society Press, USA, ISBN 07695-2662-4, 2007.
70. Emilio Corchado, Juan Corchado and *Ajith Abraham* , **Proceedings of the Second International Symposium on Hybrid Artificial Intelligent Systems - HAIS 2007**, Advances in Softcomputing Series, Springer Verlag, Germany, ISBN 978-3-540-74971-4, 2007.
71. Ning Zhang, *Ajith Abraham* , Qi Shi and Johnson Thomas, **Proceedings of the Third International Symposium on Information Assurance and Security - IAS 2007**, IEEE Computer Society press, USA, 2007.
72. Khalid Saeed, *Ajith Abraham* and Romuald Mosdorf, **Proceedings of the 6th International Conference on Computer Information Systems and Industrial Management Applications - CISIM 2007**, IEEE Computer Society press, USA, ISBN 0-7695-2894-5, 2007.
73. Jörg Roth, Jairo Gutierrez and *Ajith Abraham* , **Proceedings of the First European Conference on Data Mining - ECDM 2007**, Lisbon, Portugal, ISBN: 978-972-8924-40-9, IADIS Press, 2007.
74. David Al-Dabass, Richard Zobel, *Ajith Abraham* and Steve Turner, **Proceedings of the First Asia Modelling Symposium - AMS 2007**, Phuket, Thailand, IEEE Computer Society press, USA, ISBN 0-7695-2845-7, 2007.
75. Viorel Negru, Dana Petcu, Daniela Zaharie, *Ajith Abraham* , Bruno Buchberger, Alexandru Cicortas, Dorian Gorgan, Joel Quinqueton, **Proceedings of the 8th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing - SYNASC 2006**, IEEE Computer Society Press, USA, ISBN 0-7695-2740-X, 2006.

76. Pit Pichappan, *Ajith Abraham*, Richard Chbeir, Youakim Badr, Eyas El-Qawasmeh, David Gross-Amblard, Maytham Safar, ***Proceedings of the First IEEE International Conference on Digital Information Management -ICDIM 2006***, Bangalore, India, IEEE Press, USA, ISBN 1-4244-0682-X, 2006.
77. *Ajith Abraham*, Nikola Kasabov, Mario Köppen, Andreas König and Qun Song, ***Proceedings of the Sixth International Conference on Hybrid Intelligent Systems and Fourth Conference on Neurocomputing and Evolving Intelligence - HIS NCEI 2006***, Auckland, New Zealand, IEEE Computer Society Press, USA, ISBN 07695-2662-4, 2006.
78. *Ajith Abraham* and Sangyong Han, ***Proceedings of the Second International Conference on Next Generation Web Services Practices - NWeSP 2006***, IEEE Computer Society Press, USA, ISBN 07695-2664-0, 2006.
79. Yuehui Chen and *Ajith Abraham*, ***Proceedings of the Sixth International Conference on Intelligent Systems Design and Applications - ISDA 2006***, IEEE Computer Society Press, Volume I, II and III, ISBN 0769525288, USA, 2006.
80. *Ajith Abraham*, Sangyong Han, David Du and Marcin Paprzycki, ***Proceedings of the First International Conference on Next Generation Web Services Practices -NWeSP 2005***, IEEE Computer Society Press, USA, ISBN 0-7695-2452-4, USA, 2005 (Foreword by Dr. Jen-Yao Chung).
81. Nadia Nedjah, Luiza de Macedo Mourelle, Marley Vellasco, *Ajith Abraham* and Mario Köppen, ***Proceedings of the Sixth International Conference on Hybrid Intelligent Systems - HIS 2005***, IEEE Computer Society Press, USA, ISBN 0-7695-2457-5, 2005 (Foreword by Dr. Fernando Gomide).
82. Daniela Zaharie, Dana Petcu, Viorel Negru, Tudor Jebelean, Gabriel Ciobanu, Alexandru Cicortas, *Ajith Abraham*, Marcin Paprzycki, ***Proceedings of the 7th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing - SYNASC 2005***, IEEE Computer Society Press, USA, ISBN 0-7695-2453-2, 2005.
83. *Ajith Abraham*, Bernard De Baets, Mario Köppen and Bertram Nickolay, ***Proceedings of the Ninth Online Conference on Soft Computing and Industrial Applications - WSC 09***, Applied Soft Computing Technologies: The Challenge of Complexity, Advances in Soft Computing, Springer Verlag, Germany, ISBN 3-540-31649-3, 2006 XXXIII, 840 pages (Foreword by Dr. Ronald Yager).
84. *Ajith Abraham*, Yasuhiko Dote, Takeshi Furuhashi, Mario Köppen, Azuma Ohuchi and Yukio Ohsawa, ***Proceedings of the Fourth IEEE International Conference on Soft Computing as Transdisciplinary Science and Technology - WSTST 2005***, Soft Computing as Transdisciplinary Science and Technology, Advances in Soft Computing, ISBN 3-540-25055-7, Springer Verlag, Germany, 1358 pages, 2005 (Foreword by Dr. Lotfi A. Zadeh).
85. Henry Selvaraj, Pradip K. Srimani, Amanda Spink, Emma Regentova, *Ajith Abraham*, Johnson Thomas et al., ***Proceedings of the IEEE International Conference on Information Technology: Coding and Computing - ITCC 2005***, Volume I (811 pages) and Volume II (839 pages), ISBN 0-7695-2315-3, IEEE Computer Society Press, USA, 2005.
86. Masumi Ishikawa, Shuji Hashimoto, Marcin Paprzycki, Emilia Barakova, Kaori Yoshida, Mario Köppen, David W. Corne, and *Ajith Abraham*, ***Proceedings of the Fourth International Conference on Hybrid Intelligent Systems - HIS 2004***, ISBN 0-7695-2291-2, IEEE Computer Society Press, USA, 2005.
87. Pradip Srimani, *Ajith Abraham*, M. Cannataro et al., ***Proceedings of the IEEE International Conference on Information Technology: Coding and Computing -ITCC 2004***, Volume I (818 pages) and Volume II (853 pages), ISBN 0-7695-2108-8, IEEE Computer Society Press, USA, 2004.
88. *Ajith Abraham*, Mario Köppen and Katrin Franke, ***Proceedings of the Third International Conference on Hybrid Intelligent Systems - HIS 2003***, Design and Application of Hybrid Intelligent Systems, IOS Press, Amsterdam, The Netherlands, ISBN 1586033948, 1156 pages, 2003 (Foreword by Dr. David B. Fogel).

89. *Ajith Abraham* , Katrin Franke and Mario Köppen, ***Proceedings of the Third International Conference on Intelligent Systems Design and Applications - ISDA 2003***, Intelligent Systems Design and Applications, Advances in Soft Computing, Springer Verlag, Germany, ISBN 3540404260, 219 Figures and 72 tables, 629 pages, 2003 (Foreword by Dr. Yasuhiko Dote).
90. *Ajith Abraham* , Mario Köppen and Javier Ruiz-del-Solar, ***Proceedings of the Second International Conference on Hybrid Intelligent Systems - HIS 2002***, Soft Computing Systems: Design, Management and Applications, IOS Press, Amsterdam, The Netherlands, ISBN 1586032976, 902 pages, 2002.
91. *Ajith Abraham* , Maumita Bhattacharya and Lakhmi Jain (Guest Eds.), ***Proceedings of the International Workshop on Intelligent Knowledge Management Techniques -IKOMAT 2002***, Intelligent Knowledge Management, , IOS Press, Amsterdam, The Netherlands, ISBN 1586032801, pp. 1413 - 1576, 2002.
92. *Ajith Abraham* and Mario Köppen, ***Proceedings of the First International Conference on Hybrid Intelligent Systems - HIS 2001***, Hybrid Information Systems, Advances in Soft Computing, Physica Verlag, Germany, ISBN 3790814806, 734 pages, 237 Figures, 2002 (Foreword by Dr. Sankar K Pal).
93. *Ajith Abraham* , Baikunth Nath, M. Sambandham and P. Saratchandran, ***Proceedings of the Second International Conference on Intelligent Systems Design and Applications - ISDA 2002***, Computational Intelligence and Applications, Dynamic Publishers Inc., USA, ISBN 096403980X, 273 pages, 2002.

#### CONFERENCE PUBLICATIONS

##### Peer Reviewed Articles Published (or in press) in International Conferences

1. Salha Alzahrani, Naomie Salim, *Ajith Abraham* and Vasile Palade, iPlag: Intelligent Plagiarism Reasoner in Scientific Publications, Proceedings of the World Congress on Information and Communication Technologies, Mumbai, India, ISBN: 978-1-4673-0125-1, IEEE, pp. 1-6, 2011.
2. Anguluri Rajasekhar, *Ajith Abraham* , Pratap Kunathi and Millie Pant, Fractal Order Speed Control of DC Motor using Levy Mutated Artificial Bee Colony Algorithm, Proceedings of the World Congress on Information and Communication Technologies, Mumbai, India, ISBN: 978-1-4673-0125-1, IEEE, pp. 7-13, 2011.
3. Lei Zhang, Yuehui Chen, *Ajith Abraham* and Zhenxiang Chen, Hybrid Flexible Neural Tree Approach for Leukemia Cancer Classification, Proceedings of the World Congress on Information and Communication Technologies, Mumbai, India, ISBN: 978-1-4673-0125-1, IEEE, pp. 32-35, 2011.
4. Sayantan Thakur, Sayantanu Paul, Ankur Mondal, Swagatam Das and *Ajith Abraham* , Face Detection using Skin Tone Segmentation, Proceedings of the World Congress on Information and Communication Technologies, Mumbai, India, ISBN: 978-1-4673-0125-1, IEEE, pp. 53-60, 2011.
5. Tribeni Prasad Banerjee, Suman Saha, Swagatam Das and *Ajith Abraham* , An Application of Fractional Intelligent Robust Controller for Electromechanical Valve, Proceedings of the World Congress on Information and Communication Technologies, Mumbai, India, ISBN: 978-1-4673-0125-1, IEEE, pp. 368-372, 2011.
6. Tibebe Beshah, Dejene Ejigu, *Ajith Abraham* , Vaclav Snasel and Pavel Kromer, Pattern Recognition and Knowledge Discovery from Road Traffic Accident Data in Ethiopia: Implications for Improving Road Safety, Proceedings of the World Congress on Information and Communication Technologies, Mumbai, India, ISBN: 978-1-4673-0125-1, IEEE, pp. 1245-1260, 2011.
7. Jie Wu, Eli?ka Ochodkov, Jan Martinovi?, Vclav Sn?el and *Ajith Abraham* , Analysis of Loop Strategies in Robot Soccer Game, Proceedings of the 11th International Conference on Intelligent Systems Design and Applications (ISDA 2011), Crdoba, Spain, ISBN: 978-1-4577-1675-1, IEEE, pp. 1288-1293, 2011.

8. Tribeni Prasad Banerjee, Swagatam Das and *Ajith Abraham* , Design of an Optimized Intelligent Controller of Electromechanical System in Aerospace Application, Proceedings of the Eleventh International Conference on Hybrid Intelligent Systems (HIS), Malacca, Malaysia, IEEE, ISBN:978-1-4577-2150-2, pp. 50-54, 2011.
9. Anguluri Rajasekhar, *Ajith Abraham* and Millie Pant, Design of Fractional Order PID Controller Using Sobol Mutated Artificial Bee Colony Algorithm, Proceedings of the Eleventh International Conference on Hybrid Intelligent Systems (HIS), Malacca, Malaysia, IEEE, ISBN:978-1-4577-2150-2, pp. 151-156, 2011.
10. Ankush Mandal, Hamim Zafar, Pradipta Ghosh, Swagatam Das and *Ajith Abraham* , An Efficient Memetic Algorithm for Parameter Tuning of PID Controller in AVR System, Proceedings of the Eleventh International Conference on Hybrid Intelligent Systems (HIS), Malacca, Malaysia, IEEE, ISBN:978-1-4577-2150-2, pp. 265-270, 2011.
11. Ankush Mandal, Swagatam Das and *Ajith Abraham* , A Differential Evolution Based Memetic Algorithm for Workload Optimization in Power Generation Plants, Proceedings of the Eleventh International Conference on Hybrid Intelligent Systems (HIS), Malacca, Malaysia, IEEE, ISBN:978-1-4577-2150-2, pp. 274-276, 2011.
12. Jie Wu, Vaclav Snasel, Eliska Ochodkova, Jan Martinovic, Vaclav Svaton and *Ajith Abraham* , Improvement of Hub Strategy in Robot Soccer Game, Third International Conference on Soft Computing and Pattern Recognition (SoCPaR 2011), IEEE, China, ISBN: 978-1-4577-1194-7, pp. 464-468, 2011.
13. Shigang Feng, Wei Wang, Hongbo Liu, *Ajith Abraham* , The Deactivation Network in Brain During Acute Stress, Third International Conference on Soft Computing and Pattern Recognition (SoCPaR 2011), IEEE, China, ISBN: 978-1-4577-1194-7, pp. 533-537, 2011.
14. Tomas Novosad, Jan Platos, Vaclav Snasel, *Ajith Abraham* and Petr Fiala, Heavy Facilities Tension Prediction Using Flexible Neural Trees, Third International Conference on Soft Computing and Pattern Recognition (SoCPaR 2011), China, IEEE, ISBN: 978-1-4577-1194-7, pp. 396-401, 2011.
15. Zdenek Horak, Milos Kudelka, Vaclav Snasel, *Ajith Abraham* and Hana Rezankova, Forcoa.NET: An Interactive Tool for Exploring the Significance of Authorship Networks in DBLP Data, Third International Conference on Computational Aspects of Social Networks (CASoN 2011), IEEE, Salamanca, Spain, ISBN: 978-1-4577-1131-2, pp. 261-266, 2011.
16. Pramod Singh, Prachi Jain and *Ajith Abraham* , Intrusion Detection and Self Healing Model for Network Security, Seventh International Conference on Next Generation Web Services Practices (NWeSP 2011), IEEE, Salamanca, Spain, ISBN: 978-1-4577-1126-8, pp. 320-325, 2011.
17. Kun Ma, Zhenxiang Chen, *Ajith Abraham* , Bo Yang and Runyuan Sun, A Transparent Data Middleware in Support of Multitenancy, Seventh International Conference on Next Generation Web Services Practices (NWeSP 2011), IEEE, Salamanca, Spain, ISBN: 978-1-4577-1126-8, pp. 1-5, 2011.
18. Tarun Kumar Sharma, Millie Pant and *Ajith Abraham* , Dichotomous Search in ABC and its Application in Parameter Estimation of Software Reliability Growth Models, Third World Congress on Nature and Biologically Inspired Computing (NaBIC 2011), Salamanca, Spain, IEEE, ISBN: 978-1-4577-1123-7, pp. 214-219, 2011.
19. Anguluri Rajasekhar, Millie Pant, *Ajith Abraham* and Ravi Kumar Jatoth, Cauchy Movements for Artificial Bees for Finding Better Food Sources, Third World Congress on Nature and Biologically Inspired Computing (NaBIC 2011), IEEE, Salamanca, Spain, ISBN: 978-1-4577-1123-7, pp. 286-291, 2011.
20. Anguluri Rajasekhar, Millie Pant and *Ajith Abraham* , A Hybrid Differential Artificial Bee Algorithm based Tuning of Fractional Order Controller for PMSM Drive, Third World Congress on Nature and Biologically Inspired Computing (NaBIC 2011), Salamanca, Spain, IEEE, ISBN: 978-1-4577-1123-7, pp. 1-6, 2011.

21. Pavel Kromer, Jan Platos, Vaclav Snasel and *Ajith Abraham*, A Comparison of Many-threaded Differential Evolution and Genetic Algorithms on CUDA, Third World Congress on Nature and Biologically Inspired Computing (NaBIC 2011), IEEE, Salamanca, Spain, ISBN: 978-1-4577-1123-7, pp. 516-521, 2011.
22. Eliska Ochodkova, Pavel Kromer, Jiri Dvorsky, Jan Platos, *Ajith Abraham* and Vaclav Snasel, Genetic Search for Quasigroups with Heterogeneous Power Sequences, Third World Congress on Nature and Biologically Inspired Computing (NaBIC 2011), IEEE, Salamanca, Spain, ISBN: 978-1-4577-1123-7, pp. 540-546, 2011.
23. Jagdish Chand Bansal, Pramod Kumar Singh, Mukesh Saraswat, Abhishek Verma, Shimpi Singh Jadon and *Ajith Abraham*, Inertia Weight Strategies in Particle Swarm Optimization, Third World Congress on Nature and Biologically Inspired Computing (NaBIC 2011), IEEE, Salamanca, Spain, ISBN: 978-1-4577-1123-7, pp. 640-647, 2011.
24. Pravesh Kumar, Millie Pant and *Ajith Abraham*, Two Enhanced Differential Evolution Variants for Solving Global Optimization Problems, Third World Congress on Nature and Biologically Inspired Computing (NaBIC 2011), Salamanca, Spain, IEEE, ISBN: 978-1-4577-1123-7, pp. 208-213, 2011.
25. Hossam M. Zawbaa, Nashwa El-Bendary, Aboul Ella Hassanien and *Ajith Abraham*, SVM-based Soccer Video Summarization System, Third World Congress on Nature and Biologically Inspired Computing (NaBIC 2011), Salamanca, Spain, IEEE, ISBN: 978-1-4577-1123-7, pp. 7-11, 2011.
26. Wafaa G. Abd-Elmonim, Neveen I. Ghali, Aboul Ella Hassanien and *Ajith Abraham*, Known-Plaintext Attack of DES-16 using Particle Swarm Optimization, Third World Congress on Nature and Biologically Inspired Computing (NaBIC 2011), Salamanca, Spain, IEEE, ISBN: 978-1-4577-1123-7, pp. 12-16, 2011.
27. Anguluri Rajasekhar, *Ajith Abraham* and Millie Pant, Levy Mutated Artificial Bee Colony Algorithm for Global Optimization, IEEE International Conference on Systems, Man and Cybernetics (IEEE SMC 2011), IEEE, Anchorage, USA, ISBN: 978-1-4577-0651-6, pp. 665-662, 2011.
28. Pavel Kromer, Jan Platos, Vaclav Snasel, *Ajith Abraham*, Fuzzy Classification by Evolutionary Algorithms, IEEE International Conference on Systems, Man and Cybernetics (IEEE SMC 2011), IEEE, Anchorage, USA, ISBN: 978-1-4577-0651-6, pp. 313-317, 2011.
29. Vaclav Snasel, Zdenek Horak, Milos Kudelka, *Ajith Abraham*, Fuzzy Signatures Organized using S-Tree, IEEE International Conference on Systems, Man and Cybernetics (IEEE SMC 2011), IEEE, Anchorage, USA, ISBN: 978-1-4577-0651-6, pp. 633-637, 2011.
30. QingHua Wang, Yina Guo and *Ajith Abraham*, Online Hand Gesture Recognition Using Surface Electromyography Based on Flexible Neural Trees, Third International Conference on Artificial Intelligence and Computational Intelligence (AICI 2011), Taiyuan, China, Lecture Notes in Computer Science, ISBN 978-3-642-23895-6, pp. 245-253, 2011.
31. Milos Kudelka, Zdenek Horak, Vaclav Snasel and *Ajith Abraham*, Weighted Co-authorship Network Based on Forgetting, 6th International Conference Future Information Technology (FutureTech 2011), Loutraki, Greece, Communications in Computer and Information Science, Springer Verlag, Germany, Volume 185, pp. 72-79, 2011.
32. Saurav Ghosh, Subhrajit Roy, Swagatam Das, *Ajith Abraham* and Sk. Minhazul Islam, Peak-to-Average Power Ratio Reduction in OFDM Systems Using an Adaptive Differential Evolution Algorithm, IEEE Congress on Evolutionary Computation (CEC 2011), New Orleans, USA, IEEE, ISBN: 978-1-4244-7833-0, pp. 1941-1949, 2011.
33. Minhazul Islam, Saurav Ghos, Swagatam Das, *Ajith Abraham* and Subhrajit Roy, A Modified Discrete Differential Evolution based TDMA Scheduling Scheme for Many to One Communications in Wireless Sensor Networks, IEEE Congress on Evolutionary Computation (CEC 2011), New Orleans, USA, IEEE, ISBN: 978-1-4244-7833-0, pp. 1950 - 1957, 2011.
34. Md Nasir, A. K. Mondal, S. Sengupta, Swagatam Das and *Ajith Abraham*, An Improved Multiobjective Evolutionary Algorithm based on Decomposition with Fuzzy Dominance, IEEE

- Congress on Evolutionary Computation (CEC 2011), New Orleans, USA, IEEE, ISBN: 978-1-4244-7833-0, pp. 765 - 772, 2011.
35. Pradipta Ghosh, Hamim Zafar, Swagatam Das and *Ajith Abraham* , Hierarchical Dynamic Neighborhood Based Particle Swarm Optimization for Global Optimization, IEEE Congress on Evolutionary Computation (CEC 2011), New Orleans, USA, IEEE, ISBN: 978-1-4244-7833-0, pp. 757-764, 2011.
  36. Udit Halder, Swagatam Das, Dipankar Maity, *Ajith Abraham* and Preetam Dasgupta, Self Adaptive Cluster Based and Weed Inspired Differential Evolution Algorithm For Real World Optimization, IEEE Congress on Evolutionary Computation (CEC 2011), New Orleans, USA, IEEE, ISBN: 978-1-4244-7833-0, pp. 750-756, 2011.
  37. Sarina Sulaiman, Siti Mariyam Shamsuddin and *Ajith Abraham* , Intelligent Web Caching Using Adaptive Regression Trees, Splines, Random Forests and Tree Net, 3rd Conference on Data Mining and Optimization (DMO 2011), Malaysia, IEEE, pp. 108-114, 2011.
  38. Pavel Krmer, Jan Platos, Vclav Snsel and *Ajith Abraham* , Many-threaded Implementation of Differential Evolution for the CUDA Platform, Genetic and Evolutionary Computation Conference (GECCO 2011), Dublin, ACM Press, ISBN: 978-1-4503-0557-0, 2011.
  39. Subhrajit Roy, Swagatam Das, Sk. Minhazul Islam, *Ajith Abraham* , Saurav Ghosh and Pavel Kromer, A Modified Differential Evolution for Autonomous Deployment and Localization of Sensor Nodes, Genetic and Evolutionary Computation Conference (GECCO 2011), Dublin, ACM Press, ISBN: 978-1-4503-0690-4, 2011.
  40. Pavel Krmer, Jan Plato?, Vclav Sn?el and *Ajith Abraham* , An Implementation of Differential Evolution for Independent Tasks Scheduling on GPU, 6th International Conference on Hybrid Artificial Intelligent Systems, (HAIS 2011), Poland, Lecture Notes in Computer Science, 2011, Volume 6678/2011, pp. 372-379, 2011.
  41. Tentu Monica, Anguluri Rajasekhar, Millie Pant and *Ajith Abraham* , Enhancing the Local Exploration Capabilities of Artificial Bee Colony using Low Discrepancy Sobol Sequence, Fourth International Conference on Contemporary Computing (ICCC 2011), India, Springer Verlag, Germany, pp. 158-168, 2011.
  42. Huawei Zhai, Weishi Zhang, Licheng Cui, Hongbo Liu, *Ajith Abraham* , A Bigraph Model for Multi-route Choice in Urban Rail Transit, International Conference on Communication Systems and Network Technologies (CSNT 2011), India, IEEE Computer Society Press, pp. 699-703, 2011.
  43. Anguluri Rajasekhar, Ravi Kumar Jatoth, *Ajith Abraham* and Vaclav Snsel, A Novel Hybrid ABF-PSO algorithm Based Tuning of Optimal FOPI Speed Controller for PMSM Drive, 12th International Carpathian Control Conference (ICCC 2011), Czech Republic, IEEE, ISBN 978-1-61284-359-9, pp. 324-329, 2011.
  44. Anguluri Rajasekhar, *Ajith Abraham* and Ravi Kumar Jatoth, Controller Tuning Using a Cauchy Mutated Artificial Bee Colony Algorithm, International Conference on Soft Computing Models in Industrial and Environmental Applications (SOCO 2011), Spain, Advances in Intelligent and Soft Computing, Springer Verlag, Germany, Volume 87/2011, pp. 11-18, 2011.
  45. Jie Wu, Vclav Sn?el, Jan Martinoviæ, Eli?ka Ochodkov and *Ajith Abraham* , Loop Strategies and Application of Rough Set Theory in Robot Soccer Game, International Conference on Soft Computing Models in Industrial and Environmental Applications (SOCO 2011), Spain, Advances in Intelligent and Soft Computing, Springer Verlag, Germany, Volume 87/2011, pp. 117-125, 2011.
  46. Radha Thangaraj, Millie Pant, Pascal Bouvry and *Ajith Abraham* , Evolutionary Algorithms for Solving Stochastic Programming Problems, International Conference on Computational Intelligence Communication Networks (CICN 2010), India, IEEE Computer Society Press, ISBN: 978-0-7695-4254-6, pp. 628-632, 2010.
  47. Lamiaa El Bakrawy, Neveen Ghali, Aboul Ella Hassanien and *Ajith Abraham* , An Associative Watermarking based Image Authentication Scheme, Tenth International Conference on Intelligent Systems Design and Applications (ISDA 10), IEEE, USA, ISBN 978-1-4244-8136-1, pp. 823 - 828, 2010.

48. Heba Eid, Ashraf Darwish, Aboul Ella Hassanien and *Ajith Abraham* , Principle Components Analysis and Support Vector Machine based Intrusion Detection System, Tenth International Conference on Intelligent Systems Design and Applications (ISDA 10), IEEE, USA, ISBN 978-1-4244-8136-1, pp. 363-367, 2010.
49. Vclav Snsel, Jiri Dvorsk?, Eliska Ochodkova, Pavel Krmer, Jan Platos and *Ajith Abraham* , Evolving Quasigroups by Genetic Algorithms, 2010 Annual International Workshop on Databases, TExts, Specifications and Objects, Stedronin-Plazy, Czech Republic, pp. 108-117, 2010.
50. Eliska Ochodkova, Jiri Dvorsk?, Vclav Snsel and *Ajith Abraham* , Testing Quasigroup Identities using Product of Sequence, 2010 Annual International Workshop on Databases, TExts, Specifications and Objects, Stedronin-Plazy, Czech Republic, pp. 155-162, 2010.
51. Tribeni Prasad Banerjee, Swagatam Das and *Ajith Abraham* , Hybrid Intelligent Predictive Control System for High Speed BLDC Motor in Aerospace Application, 3rd international Conference on Emerging trends in Engineering Technology (ICETET10), IEEE Computer Society Press, USA, ISBN 978-0-7695-4246-1, pp. 258-262, 2010.
52. Milos Kudelka, Zdenek Horak, Vaclav Snsel and *Ajith Abraham* , Social Network Reduction Based on Stability, International Conference on Computational Aspects of Social Networks (CASoN 2010), IEEE Computer Society Press, USA, ISBN: 978-0-7695-4202-7, pp. 509-514, 2010.
53. Hala Own, Nehal Abd Al and *Ajith Abraham* , A New Weighted Rough Set Framework for Imbalance Class Distribution, Second International Conference on Soft Computing and Pattern Recognition (SoCPaR 2010), IEEE, USA, ISBN 978-1-4244-7896-5, pp. 29-34, 2010.
54. Siddharth Pal, Aniruddha Basak, Swagatam Das, *Ajith Abraham* and Ivan Zelinka, Concentric Circular Antenna Array Synthesis Using a Differential Invasive Weed Optimization Algorithm, Second International Conference on Soft Computing and Pattern Recognition (SoCPaR 2010), IEEE, USA, ISBN 978-1-4244-7896-5, pp. 29-34, 2010.
55. Vaclav Snsel, Jan Platos, Pavel Kromer, Nabil Ouddane and *Ajith Abraham* , Interleaver Optimization by Population Based Metaheuristics, World Congress on Nature and Biologically Inspired Computing (NaBIC 2010), Japan, IEEE, ISBN 978-1-4244-7375, pp. 679-684, 2010.
56. Arnob Ghosh , Ritwik Giri, Aritra Chowdhury, Swagatam Das, and *Ajith Abraham* , Two-Channel Quadrature Mirror Bank Filter Design Using a Fitness- Adaptive Differential Evolution Algorithm, World Congress on Nature and Biologically Inspired Computing (NaBIC 2010), Japan, IEEE, ISBN 978-1-4244-7375, pp. 643-648, 2010.
57. Nashwa El-Bendary, Hameed Al-Qaheri, Hossan Zawbaa, Mohamed Hamed, Aboul Ella Hassanien, Zhao Qiangfu and *Ajith Abraham* , HSAS: Heart Sound Authentication System, World Congress on Nature and Biologically Inspired Computing (NaBIC 2010), Japan, IEEE, ISBN 978-1-4244-7375, pp. 358-363, 2010.
58. Vclav Sn?el, Pavel Krmer, Jan Plato? and *Ajith Abraham* , The Evolution of Fuzzy Classifier for Data Mining with Applications, 8th International Conference on Simulated Evolution and Learning (SEAL 2010), Lecture Notes in Computer Science, Volume 6457, pp. 349-358, 2010.
59. Radha Thangaraj, Millie Pant, Pascal Bouvry and *Ajith Abraham* , Solving Multi Objective Stochastic Programming Problems Using Differential Evolution, International Conference on Swarm, Evolutionary and Memetic Computing, Lecture Notes in Computer Science, Volume 6466/2010, pp. 54-61, 2010.
60. Siddharth Pal, Annirudha Basak, Swagatam Das, *Ajith Abraham* and Vaclav Snsel, Automatic Shell Clustering A Metaheuristic Approach, IEEE Conference on Systems, Man and Cybernetics (SMC 2010), Turkey, IEEE, ISBN: 978-1-4244-6586-6, pp. 2579-2586, 2010.
61. Radha Thangaraj, Millie Pant, *Ajith Abraham* , Kusum Deep, Vaclav Snsel, Differential Evolution Using a Localized Cauchy Mutation Operator, IEEE Conference on Systems, Man and Cybernetics (SMC 2010), Turkey, IEEE, ISBN: 978-1-4244-6586-6, pp. 3710-3716, 2010.
62. Musrrat ali, Millie Pant, *Ajith Abraham* , Vaclav Snsel, Modified Differential Evolution Algorithm for Parameter Estimation in Mathematical Models, IEEE Conference on Systems, Man and Cybernetics (SMC 2010), Turkey, IEEE, ISBN: 978-1-4244-6586-6, pp. 2767-2772, 2010.

63. Ritwik Giri, Aritra Chowdhury, Swagatam Das, *Ajith Abraham* , Vaclav Snasel and Arnob Ghosh, An Improved Invasive Weed Optimization Algorithm for Training of Feed-Forward Neural Networks, IEEE Conference on Systems, Man and Cybernetics (SMC 2010), Turkey, IEEE, ISBN: 978-1-4244-6586-6, pp. 3166-3173, 2010. Jie Wu, Vaclav Snasel and *Ajith Abraham* , A Vision-based Navigation System of Mobile Tracking Robot, IEEE Conference on Systems, Man and Cybernetics (SMC 2010), Turkey, IEEE, ISBN: 978-1-4244-6586-6, pp. 3053-3059, 2010.
64. Radha Thangaraj, Thanga Raj Chelliah, Pascal Bouvry, Millie Pant and *Ajith Abraham* , Optimal Design of Induction Motor for a Spinning Machine Using Population Based Meta-heuristics , 9th International Conference on Computer Information Systems and Industrial Management Applications (CISIM 2010), IEEE, ISBN 978-1-4244-7816-3, pp. 341-346, 2010.
65. Dong-Hwa Kim and *Ajith Abraham* , Nature Inspired Solutions for Green Energy, 9th International Conference on Computer Information Systems and Industrial Management Applications (CISIM 2010), IEEE, ISBN 978-1-4244-7816-3, pp. 116-119, 2010.
66. Zhenxiang Chen, Kun Ma, *Ajith Abraham* and Bo Yang, An Executable Business Model for Generic Web Applications, Sixth International Conference on Next Generation Web Services Practices (NWeSP 2010), India, IEEE, ISBN 978-1-4244-7816-3, pp. 573-577, 2010.
67. Hong Tian, Yunhong Li, Hongbo Liu, *Ajith Abraham* , An Optimized Ontology Transfer Learning Method, Sixth International Conference on Next Generation Web Services Practices (NWeSP 2010), India, IEEE, ISBN 978-1-4244-7816-3, pp. 569-572, 2010.
68. Sarina Sulaiman, Siti Mariyam Shamsuddin, *Ajith Abraham* and Shahida Sulaiman, Intelligent Mobile Web Pre-fetching Using XML Technology, Sixth International Conference on Next Generation Web Services Practices (NWeSP 2010), India, IEEE, ISBN 978-1-4244-7816-3, pp. 475-480, 2010.
69. Pavel Krmer, Vclav Sn?el, Jan Plato? and *Ajith Abraham* , Evolving Fuzzy Classifier for Data Mining - an Information Retrieval Approach, Proceedings of the 3rd International Conference on Computational Intelligence in Security for Information Systems (CISIS10), Springer Verlag, Germany, pp. 25-32, 2010.
70. Sarina Sulaiman, Siti Mariyam Shamsuddin, Sheikh Nasir Kamarudin and *Ajith Abraham* , Data Warehousing for Rough Web Caching and Prefetching, IEEE International Conference on Granular Computing (IEEE GrC 2010), San Jose, IEEE Computer Society, USA, ISBN 978-0-7695-4161-7, pp. 443-448, 2010.
71. Prithwish Chakraborty, Swagatam Das, *Ajith Abraham* , Gourab Roy and Vaclav Snasel, On Convergence of Multi-objective Particle Swarm Optimizers, IEEE World Congress on Computational Intelligence (WCCI 2010), Barcelona, IEEE, USA, ISBN 978-1-4244-8126-2, pp. 3507-3514, 2010.
72. Aritra Chowdhury, Ritwik Giri, Arnob Ghosh, Swagatam Das, *Ajith Abraham* and Vaclav Snasel, Linear Antenna Array Synthesis using Fitness-Adaptive Differential Evolution Algorithm, IEEE World Congress on Computational Intelligence (WCCI 2010), Barcelona, IEEE, USA, ISBN 978-1-4244-8126-2, pp. 372-379, 2010.
73. Aniruddha Basak, Siddharth Pal, Swagatam Das, *Ajith Abraham* and Vaclav Snasel, A Modified Invasive Weed Optimization Algorithm for Time-Modulated Linear Antenna Array Synthesis, IEEE World Congress on Computational Intelligence (WCCI 2010), Barcelona, IEEE, USA, ISBN 978-1-4244-8126-2, pp. 3137-3144, 2010.
74. Vaclav Snasel, Zdenek Horak and *Ajith Abraham* , Link Suggestions in Terrorists Networks Using Semi Discrete Decomposition, Sixth International Conference on Information Assurance and Security (IAS), USA, IEEE, ISBN 978-1-4244-7408-0, pp. 337-339, 2010.
75. Mrutyunjaya Panda, *Ajith Abraham* and Manas Patra, Discriminative Multinomial Nave Bayes for Network Intrusion Detection, Sixth International Conference on Information Assurance and Security (IAS), USA, IEEE, ISBN 978-1-4244-7408-0, pp. 122-127, 2010.
76. Jan Platos, Pavel Kromer, Vaclav Snasel and *Ajith Abraham* , Scaling IDS Construction Based on Non-negative Matrix Factorization Using GPU computing, Sixth International Conference

- on Information Assurance and Security (IAS), USA, IEEE, ISBN 978-1-4244-7408-0, pp. 122-127, 2010.
77. Tibebe Tesema, *Ajith Abraham* and Dawn Medlin, Patient's Perception of Health Information Security, Sixth International Conference on Information Assurance and Security (IAS), USA, IEEE, ISBN 978-1-4244-7408-0, pp. 179-184, 2010.
  78. Tomas Novosad, Jan Platos, Vaclav Snasel and *Ajith Abraham* , Fast Intrusion Detection System based on Flexible Neural Tree, Sixth International Conference on Information Assurance and Security (IAS), USA, IEEE, ISBN 978-1-4244-7408-0, pp. 142-147, 2010.
  79. Pavel Kromer, Jan Platos, Vaclav Snasel and *Ajith Abraham* , Towards Intrusion Detection by Information Retrieval and Genetic Programming, Sixth International Conference on Information Assurance and Security (IAS), USA, IEEE, ISBN 978-1-4244-7408-0, pp. 148-153, 2010. Jie Wu, Vaclav Snasel, *Ajith Abraham* and Aboul Ella Hassanien, Fuzzified Aho-Corasick Search Automata, Sixth International Conference on Information Assurance and Security (IAS), USA, IEEE, ISBN 978-1-4244-7408-0, pp. 340-344, 2010.
  80. Vaclav Snasel, *Ajith Abraham* , Khalid Saeed and Hameed Al-Qaheri, A Framework for Cyber Surveillance of Unlawful Activities for Critical Infrastructure Using Computational Grids, Sixth International Conference on Information Assurance and Security (IAS), USA, IEEE, ISBN 978-1-4244-7408-0, pp. 345-350, 2010.
  81. Johnson P Thomas, Vinay Abburi, Mathew Thomas and *Ajith Abraham* , Secure Protocol for Ad Hoc Transportation System, Sixth International Conference on Information Assurance and Security (IAS), USA, IEEE, ISBN 978-1-4244-7408-0, pp. 288-293, 2010.
  82. Arnob Ghosh, Aritra Chowdhury, Swagatham Das and *Ajith Abraham* , A Hybrid Evolutionary Direct Search Technique for Solving Optimal Control Problems, Tenth International Conference on Hybrid Intelligent Systems, USA, IEEE, ISBN 978-1-4244-7364-9, pp. 125-130, 2010.
  83. Annirudha Basak, Siddharth Pal, Swagatham Das and *Ajith Abraham* , Circular Antenna Array Synthesis with a Differential Invasive Weed Optimization Algorithm, Tenth International Conference on Hybrid Intelligent Systems, USA, IEEE, ISBN 978-1-4244-7364-9, pp. 153-158, 2010.
  84. Pavel Kromer, Vaclav Snasel, Jan Platos and *Ajith Abraham* , Evolutionary Improvement of Search Queries and Its Parameters, Tenth International Conference on Hybrid Intelligent Systems, USA, IEEE, ISBN 978-1-4244-7364-9, pp. 147-152, 2010.
  85. Pooya Najafi Zanjani and *Ajith Abraham* , A Method for Calibrating Micro Electro Mechanical Systems Accelerometer for Use as a Tilt and Seismograph Sensor, 12th International Conference on Computer Modelling and Simulation (UKSIM 10), ISBN 978-0-7695-4016-0, IEEE Computer Society Press, pp.637-641, 2010.
  86. Tribeni Prasad Banerjee, Swagatham Das, Joydeb Roychoudhury and *Ajith Abraham* , Implementation of a New Hybrid Methodology for Fault Signal Classification Using Short -Time Fourier Transform and Support Vector Machines, 5th International Workshop on Soft Computing Models in Industrial and Environmental Applications (SOCO 2010), Porto, Portugal, Springer Verlag, Germany, ISBN 978-3-642-13160-8, pp. 219-225, 2010.
  87. Vaclav Snasel, Jiřka Dvorská, Eliška Ochodková, Pavel Kromer, Jan Platos and *Ajith Abraham* , Genetic Algorithms Evolving Quasigroups with Good Pseudo-random Properties, Lecture Notes in Computer Science, Volume 6018, Springer Verlag, Germany, pp. 472-482, 2010.
  88. Tom Novosad, Vaclav Snasel, *Ajith Abraham* and Jack Yang, PROSIMA: Protein Similarity Algorithm, World Congress on Nature and Biologically Inspired Computing (NaBIC 2009), India, IEEE Press, ISBN: 978-1-4244-5612-3, pp. 84-91, 2009.
  89. Hesam Izakian, *Ajith Abraham* and Vaclav Snasel, Fuzzy Clustering Using Hybrid Fuzzy c-means and Fuzzy Particle Swarm Optimization, World Congress on Nature and Biologically Inspired Computing (NaBIC 2009), India, IEEE Press, ISBN: 978-1-4244-5612-3, pp. 1690-1694, 2009.

90. Musrrat Ali, Millie Pant and *Ajith Abraham* ,Inserting Information Sharing Mechanism of Particle Swarm Optimization Algorithm to Improve the Convergence of Differential Evolution Algorithm, World Congress on Nature and Biologically Inspired Computing (NaBIC 2009), India, IEEE Press, ISBN: 978-1-4244-5612-3, pp. 2009.
91. Sayan Ghosh, Debarati Kundu, Kaushik Suresh, Swagatam Das and *Ajith Abraham* , Design of Optimal Digital IIR Filters by Using a Bandwidth Adaptive Harmony Search Algorithm, World Congress on Nature and Biologically Inspired Computing (NaBIC 2009), India, IEEE Press, ISBN: 978-1-4244-5612-3, pp. 481-486, 2009.
92. Radha Thangaraj, Millie Pant and *Ajith Abraham* , A Simple Adaptive Differential Evolution Algorithm, World Congress on Nature and Biologically Inspired Computing (NaBIC 2009), India, IEEE Press, ISBN: 978-1-4244-5612-3, pp. 467-452, 2009.
93. Kaushik Suresh, Debarati Kundu, Sayan Ghosh, Swagatam Das and *Ajith Abraham* , IWO with Increased Deviation and Stochastic Selection (IWO-ID-SS) for global optimization of noisy fitness functions, World Congress on Nature and Biologically Inspired Computing (NaBIC 2009), India, IEEE Press, ISBN: 978-1-4244-5612-3, pp. 215-220, 2009.
94. Hongbo Liu, *Ajith Abraham* and Vaclav Snasel, Convergence Analysis of Swarm Algorithm, World Congress on Nature and Biologically Inspired Computing (NaBIC 2009), India, IEEE Press, ISBN: 978-1-4244-5612-3, pp. 1714 - 1719, 2009.
95. Hesam Izakian, *Ajith Abraham* and Vclav Sn?el, Clustering Categorical Data Using a Swarm-based Method, World Congress on Nature and Biologically Inspired Computing (NaBIC 2009), India, IEEE Press, ISBN: 978-1-4244-5612-3, pp. 1720-1724, 2009.
96. Radha Thangaraj, Millie Pant and *Ajith Abraham* , A New Diversity Guided Particle Swarm Optimization with Mutation, World Congress on Nature and Biologically Inspired Computing (NaBIC 2009), India, IEEE Press, ISBN: 978-1-4244-5612-3, pp. 294-299, 2009.
97. Vaclav Snasel, *Ajith Abraham* , Jiri Dvorsky, Eliska Ochodkova, Jan Platos and Pavel Kromer, Searching for Quasigroups for Hash Functions with Genetic Algorithms, World Congress on Nature and Biologically Inspired Computing (NaBIC 2009), India, IEEE Press, ISBN: 978-1-4244-5612-3, pp. 367-372, 2009.
98. Tribeni Prasad Banerjee, Amit Konar and *Ajith Abraham* , CAM Based High-Speed Compressed Data Communication System Development using FPGA, 8th International Conference on Computer Information Systems and Industrial Management (CISIM 2009), IEEE Press, ISBN: 978-1-4244-5612-3, pp. 959-964, 2009.
99. Jiri Dvorsky, Eliska Ochodkova, Vaclav Snasel and *Ajith Abraham* , Large Quasigroups in Cryptography and their Properties Testing, 8th International Conference on Computer Information Systems and Industrial Management (CISIM 2009), IEEE Press, ISBN: 978-1-4244-5612-3, pp. 965-971, 2009.
100. Radha Thangaraj, Millie Pant and *Ajith Abraham* , Evolutionary Algorithms Based Speed Optimization of Servo Motor in Optical Disc Systems, 8th International Conference on Computer Information Systems and Industrial Management (CISIM 2009), IEEE Press, ISBN: 978-1-4244-5612-3, pp. 855-860, 2009.
101. Sarina Sulaiman, Siti Mariyam Shamsuddin and *Ajith Abraham* , Rough Neuro-PSO Web Caching and XML Prefetching for Accessing Facebook from Mobile Environment, 8th International Conference on Computer Information Systems and Industrial Management (CISIM 2009), IEEE Press, ISBN: 978-1-4244-5612-3, pp. 884-889, 2009.
102. Musrrat Ali, Millie Pant and *Ajith Abraham* , A Hybrid Ant Colony Differential Evolution and its Application to Water Resources Problems, World Congress on Nature and Biologically Inspired Computing (NaBIC 2009), India, IEEE Press, ISBN: 978-1-4244-5612-3, pp. 1133-1138, 2009.
103. Musrrat Ali, Millie Pant and *Ajith Abraham* , A Modified Differential Evolution Algorithm and Its Application to Engineering Problems, International Conference on Softcomputing and Pattern Recognition (SoCPaR 2009), IEEE Computer Society, USA, ISBN 978-0-7695-3879-2, pp. 196-201, 2009.

104. Linlin Shao, Yuehui Chen and *Ajith Abraham* , Motif Discovery using Evolutionary Algorithms, International Conference on Softcomputing and Pattern Recognition (SoCPaR 2009), IEEE Computer Society, USA, ISBN 978-0-7695-3879-2, pp. 420-425, 2009.
105. Siddharth Pal, Anniruddha Basak, Swagatam Das and *Ajith Abraham* , Linear Antenna Array Synthesis with Invasive Weed Optimization Algorithm, International Conference on Softcomputing and Pattern Recognition (SoCPaR 2009), IEEE Computer Society, USA, ISBN 978-0-7695-3879-2, pp. 161-166, 2009.
106. Vaclav Snasel, Tomas Novosad and *Ajith Abraham* , YAPS: Yet Another Protein Similarity, International Conference on Softcomputing and Pattern Recognition (SoCPaR 2009), IEEE Computer Society, USA, ISBN 978-0-7695-3879-2, pp. 497-504, 2009.
107. Pavel Kromer, Vaclav Snasel, Jan Platos, *Ajith Abraham* and Hesam Izakian, Scheduling Independent Tasks on Heterogeneous Distributed Environments by Differential Evolution, International Conference on Intelligent Networking and Collaborative Systems (INCOS 2009), Barcelona, IEEE Computer Society Press, USA, ISBN 978-0-7695-3858-7, pp. 170-174, 2009.
108. Vaclav Snasel, Zdenek Horak, Jana Kocibova and *Ajith Abraham* , Analyzing social networks using formal concept analysis: Complexity aspects, 2009 IEEE/WIC/ACM International Conference on Web Intelligence and Intelligent Agent Technology (WI-IAT 2009), Italy, IEEE Computer Society Press, USA, ISBN: 978-0-7695-3801-3, pp. 38-41, 2009.
109. Vaclav Snasel, Zdenek Horak, Jana Kocibova and *Ajith Abraham* , Reducing Social Network Dimensions Using Matrix Factorization Methods, 2009 International Conference on Advances in Social Network Analysis and Mining (ASONAM 2009), Athens, Greece, ISBN: 978-0-7695-3689-7, pp. 348-351, 2009.
110. Vaclav Snasel, Zdenek Horak, Jana Kocibova and *Ajith Abraham* , On Social Networks Reduction, 18th International Symposium on Foundations of Intelligent Systems (ISMIS 2009), Prague, Czech Republic, Lecture Notes in Computer Science 5722, ISBN 978-3-642-04124-2, pp. 533-541, 2009.
111. Fatos Xhafa and *Ajith Abraham* , A Compendium of Heuristic Methods for Scheduling in Computational Grids, 10th International Conference on Intelligent Data Engineering and Automated Learning (IDEAL 2009), Burgos, Lecture Notes in Computer Science, Springer, ISBN 978-3-642-04393-2, pp. 751-758, 2009.
112. Eliska ochodkova, Jiri Dvorsky, Vaclav Snasel and *Ajith Abraham* , Testing the properties of large quasigroups, International Conference on Ultra Modern Communications (ICUMT 2009), St. Petersburg, Russia, IEEE Press, 2009.
113. Joydeb Roy choudhury, Tribeni Prasad Banerjee, Swagatam Das, *Ajith Abraham* and Vaclav Snasel, Fuzzy Rule based Intelligent Security and Fire Detector System, 2nd International Workshop on Computational Intelligence in Security for Information Systems (CISIS'09), Burgos, Spain, Springer Verlag, Germany, ISBN 978-3-642-04090-0, pp. 45-51, 2009.
114. Azah Kamilah Muda, Siti Mariyam Shamsuddin and *Ajith Abraham* , Authorship Invariance for Writer Identification, International Conference on Biometrics and Kansei Engineering, Poland, IEEE Computer Society Press, ISBN: 978-0-7695-3692-7, pp. 34-39, 2009.
115. Milos Kudelka, Vaclav Snasel, Zdenek Horak, *Ajith Abraham* , Web Site Description Based on Genres and Web Design Patterns, International Conference on Social Informatics (SocInfo'09), Warsaw, Poland, IEEE Computer Society Press, USA, ISBN: 978-0-7695-3706-1, pp. 68-73, 2009.
116. Vaclav Snasel, Ales Keprt, *Ajith Abraham* and Aboul Hassanien, Approximate String Matching by Fuzzy Automata, International Conference on Man-Machine Interactions, The Beskids - Kocierz Pass, Poland, Advances in Soft Computing, Springer Verlag Germany, ISBN 978-3-642-00562-6, pp. 281-290, 2009.
117. *Ajith Abraham* , Crina Grosan, Hongbo Liu, Yuehui Chen, Hierarchical Takagi-Sugeno Models for Online Security Evaluation Systems, Fifth International Conference on Information Assurance and Security (IAS 2009), China, IEEE Computer Society Press, USA, ISBN 978-0-7695-3744-3, pp. 687-692, 2009.

118. Jan Platos, Vaclav Snasel, Pavel Kromer and *Ajith Abraham* , Detecting Insider Attacks Using Non-negative Matrix Factorization, Fifth International Conference on Information Assurance and Security (IAS 2009), China, IEEE Computer Society Press, USA, ISBN 978-0-7695-3744-3, pp. 693-696, 2009.
119. Ravikumar Pandi, Bijaya Panigrahi, Manas Mallick, *Ajith Abraham* and Swagatam Das, Improved Harmony Search for Economic Power Dispatch, Ninth International Conference on Hybrid Intelligent Systems, China, IEEE Computer Society Press, USA, ISBN-13: 978-0-7695-3745-0, pp. 403-408, 2009.
120. Mingyan Zhao, Hongbo Liu, *Ajith Abraham* and Emilio Corchado, A Swarm-based Rough Set Approach for Group Decision Support Systems, Ninth International Conference on Hybrid Intelligent Systems, China, IEEE Computer Society Press, USA, ISBN-13: 978-0-7695-3745-0, pp. 365-369, 2009.
121. Joydeb Roychoudhury, Tribeni P. Banerjee, Anup K. Bandopadhyaya and *Ajith Abraham* , Design Methodology of a Fault Aware Controller Using an Incipient Fault Diagonizer, Ninth International Conference on Hybrid Intelligent Systems, China, IEEE Computer Society Press, USA, ISBN-13: 978-0-7695-3745-0, pp. 15-19, 2009.
122. Hesam Izakian, *Ajith Abraham* , Vaclav Snasel, Scheduling Meta-tasks in Distributed Heterogeneous Computing Systems: A Meta-Heuristic Particle Swarm Optimization Approach, Ninth International Conference on Hybrid Intelligent Systems (HIS 2009), China, IEEE Computer Society Press, USA, ISBN-13: 978-0-7695-3745-0, pp. 397-402, 2009.
123. Sayan Ghosh, Debarati Kundu, Kaushik Suresh, Swagatam Das, *Ajith Abraham* , Bijaya Panigrahi and Vaclav Snasel, On Some Properties of the lbest Topology in Particle Swarm Optimization, Ninth International Conference on Hybrid Intelligent Systems, China, IEEE Computer Society Press, USA, ISBN-13: 978-0-7695-3745-0, pp. 370-375, 2009.
124. Pavel Kromer, Vaclav Snasel, Jan Platos and *Ajith Abraham* , Optimization of Turbo Codes by Differential Evolution and Genetic Algorithms, Ninth International Conference on Hybrid Intelligent Systems, China, IEEE Computer Society Press, USA, ISBN-13: 978-0-7695-3745-0, pp. 376-381, 2009.
125. Milos Kudelka, Vaclav Snasel, Zdenek Horak and *Ajith Abraham* , Social Aspects of Web Page Contents, International Conference on Computational Aspects of Social Networks (CASoN 2009), France, IEEE Computer Society Press, USA, ISBN-13: 978-0-7695-3740-5, pp. 80-87, 2009.
126. Radha Thangaraj, Millie Pant, *Ajith Abraham* and Youakim Badr, Hybrid Evolutionary Algorithm for Solving Global Optimization Problems, 4th International Conference on Hybrid Artificial Intelligent Systems, Salamanca, Spain, Lecture Notes in Computer Science 5572, Springer Verlag, Germany, ISBN 978-3-642-02318-7, pp. 310-318, 2009.
127. Arijit Biswas, Sambarta Dasgupta, Bijaya K Panigrahi, V. Ravikumar Pandi, Swagatam Das, *Ajith Abraham* and Youakim Badr, Economic Load Dispatch Using a Chemotactic Differential Evolution Algorithm, 4th International Conference on Hybrid Artificial Intelligent Systems, Salamanca, Spain, Lecture Notes in Computer Science 5572, Springer Verlag, Germany, ISBN 978-3-642-02318-7, pp. 252-260, 2009.
128. Debarati Kundu, Kaushik Suresh, Sayan Ghosh, Swagatam Das, *Ajith Abraham* and Youakim Badr, Automatic Clustering Using a Synergy of Genetic Algorithm and Multi-objective Differential Evolution, 4th International Conference on Hybrid Artificial Intelligent Systems, Salamanca, Spain, Lecture Notes in Computer Science 5572, Springer Verlag, Germany, ISBN 978-3-642-02318-7, pp. 177-186, 2009.
129. Fatos Xhafa, Juan Gonzalez, Keshav Dahal and *Ajith Abraham* , A Genetic Algorithm - Tabu Search Hybrid Algorithm for Scheduling in Computational Grids, 4th International Conference on Hybrid Artificial Intelligent Systems, Salamanca, Spain, Lecture Notes in Computer Science 5572, Springer Verlag, Germany, ISBN 978-3-642-02318-7, pp. 285-292, 2009.
130. Hesam Izakian, *Ajith Abraham* , Vaclav Snasel, Comparison of Heuristics for Scheduling Independent Tasks on Heterogeneous Distributed Environments, The 2009 IEEE International

- Workshop on HPC and Grid Applications (IWHGA2009), China, IEEE Press, USA, ISBN 978-0-7695-3605-7, pp. 8-12, 2009.
131. Sarina Sulaiman, Siti Mariyam Shamsuddin, Fadni Forkan and *Ajith Abraham*, Autonomous Spy: Intelligent Web proxy Caching Detection Using Neurocomputing and Particle Swarm Optimization, Proceeding of the 6th International Symposium on Mechatronics and its Applications (ISMA09), Sharjah, UAE, IEEE Press, ISBN: 978-1-4244-3480-0, pp. 1-6, 2009.
  132. Sarina Sulaiman, Siti Mariyam Shamsuddin, Fadni Forkan, *Ajith Abraham* and Shahida Sulaiman, Intelligent Web Caching for E-learning Log Data, Third International Conference on Modeling and Simulation, AMS-09, Indonesia, IEEE Computer Society Press, 2009.
  133. Vaclav Snasel, *Ajith Abraham*, Jan Platos and Pavel Kromer, Hash Functions Based on Large Quasigroups, International Conference on Computational Science (ICCS 2009), Louisiana, USA, Springer Verlag, Germany, Lecture Notes in Computer Science 5544, ISBN 978-3-642-01969-2, pp. 521-529, 2009.
  134. Santi Caballe, Fatos Xhafa and *Ajith Abraham*, A Replication-based Approach for the Improvement of the Online Learning Experience in Distributed Environments, 3rd International Workshop on P2P, Parallel, Grid and Internet Computing (3PGIC-2009), Fukuoka, Japan, IEEE Computer Society, pp. 433-438, 2009.
  135. Kaushik Suresh, Debarati Kundu, Sayan Ghosh, Swagatam Das and *Ajith Abraham*, Automatic Clustering with Multi-objective Differential Evolution Algorithms, 2009 IEEE Congress on Evolutionary Computation, Trondheim, Norway, IEEE Press, pp. 2590-2597, 2009.
  136. Sambarta Dasgupta, Arijit Biswas, Swagatam Das, Bijaya Ketan Panigrahi and *Ajith Abraham*, A Micro-Bacterial Foraging Algorithm for High-Dimensional Optimization, 2009 IEEE Congress on Evolutionary Computation, Trondheim, Norway, IEEE Press, pp. 785-792, 2009.
  137. Millie Pant, Musrrat Ali and *Ajith Abraham*, Mixed Mutation Strategy Embedded Differential Evolution, 2009 IEEE Congress on Evolutionary Computation, Trondheim, Norway, IEEE Press, pp. 1240-1246, 2009.
  138. Swagatam Das, Archana Chowdhury and *Ajith Abraham*, A Bacterial Evolutionary Algorithm for Automatic Data Clustering, 2009 IEEE Congress on Evolutionary Computation, Trondheim, Norway, IEEE Press, pp. 2403-2410, 2009.
  139. Millie Pant, Radha Thangaraj, *Ajith Abraham* and Crina Grosan, Differential Evolution with Laplace Mutation Operator, 2009 IEEE Congress on Evolutionary Computation, Trondheim, Norway, IEEE Press, pp. 2841-2849, 2009.
  140. *Ajith Abraham*, Crina Grosan, Vaclav Snasel, Programming Risk Assessment Models for Online Security Evaluation Systems, Eleventh International Conference on Computer Modeling and Simulation, UKSiM/EUROSiM 2009, Cambridge, UK, IEEE Computer Society Press, USA, pp. 41-46, 2009.
  141. Jun Young Bae, Youakim Badr, *Ajith Abraham*, A Takagi-Sugeno Fuzzy Model of a Rudimentary Angle Controller for Artillery Fire, Eleventh International Conference on Computer Modeling and Simulation, UKSiM/EUROSiM 2009, Cambridge, UK, IEEE Computer Society Press, USA, pp. 59-64, 2009.
  142. Jose Francisco Saray Villamizar, Youakim Badr, *Ajith Abraham*, An Enhanced Fuzzy-Genetic Algorithm to Solve Satisfiability Problems, Eleventh International Conference on Computer Modeling and Simulation, UKSiM/EUROSiM 2009, Cambridge, UK, IEEE Computer Society Press, USA, pp. 77-82, 2009.
  143. Hesam Izakian, Behrouz Tork Ladani, Kamran Zamanifar, *Ajith Abraham* and Vaclav Snasel, A Continuous Double Auction Method for Resource Allocation in Computational Grids, 2009 IEEE Symposium on Computational Intelligence in Scheduling (CISched 2009), Nashville, USA, IEEE Press, USA, pp. 29-35, 2009.
  144. Aboul Hassanien, *Ajith Abraham*, James Peters, Gerald Schaefer, Rough Sets in Medical Informatics Applications, WSC 2008 Online World Conference on Soft Computing in Industrial Applications, Springer Verlag, Germany, ISBN 978-3-540-89618-0, pp. 23-30, 2009.

145. Sayan Ghosh, Debarati Kundu, Kaushik Suresh, Swagatam Das and *Ajith Abraham* , An Adaptive Particle Swarm Optimizer with Balanced Explorative and Exploitative Behaviors, 10th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing, IEEE Computer Society Press, USA, ISBN 978-0-7695-3523-4, pp. 543-550, 2008.
146. Hesam Izakian, Behrouz Ladani, Kamran Zamanifar and *Ajith Abraham* , A Particle Swarm Optimization Approach for Grid Job Scheduling, Third International Conference on Information Systems, Technology and Management (ICISTM-09), Communications in Computer and Information Science, Springer Verlag, Germany, ISBN 978-3-642-00404-9, pp. 100-109, 2009.
147. Bijaya K.Panigrahi, Ravi Kumar Pandi, *Ajith Abraham* , Swagatam Das, A Machine Intelligence Approach for Classification of Power Quality Disturbances, Proceedings of the International Workshop on Machine Intelligence Research (MIR Day 2009), Nagpur, India, ISBN 978-81-8465-033-4, pp. 47-53, 2009.
148. Vaclav Snasel, Zdenek Horak and *Ajith Abraham* , Understanding social networks using Formal Concept Analysis, 2008 IEEE/WIC/ACM International Conference on Web Intelligence (WI-IAT 2008), Sydney, Australia, IEEE Computer Society Press, USA, vol. 3, pp.390-393, 2008.
149. Tianyang Liu, He Guo, Xiukun Wang, *Ajith Abraham* and Hongbo Liu, A Machine Vision Approach for Jacket Launching Angle Measurement, IEEE Third International Conference on Digital Information Management (ICDIM 2008), London, IEEE Press, USA, ISBN 978-1-4244-2917-2, pp. 227-232, 2008.
150. Santi Caballe, Fatos Xhafa and *Ajith Abraham* , Towards an Automatic Real-Time Assessment of Online Discussions in Computer-Supported Collaborative Learning Practices, IEEE Third International Conference on Digital Information Management (ICDIM 2008), London, IEEE Press, USA, ISBN 978-1-4244-2917-2, pp. 470-475, 2008.
151. Arpan Mukhopadhyay, Anwit Roy, Sourav Das, Swagatam Das and *Ajith Abraham* , Population-Variance and Explorative Power of Harmony Search: An Analysis, IEEE Third International Conference on Digital Information Management (ICDIM 2008), London, IEEE Press, USA, ISBN 978-1-4244-2917-2, pp. 775-781, 2008.
152. Millie Pant, Radha Thangaraj, Crina Grosan and *Ajith Abraham* , Hybrid Differential Evolution Particle Swarm Optimization Algorithm for Solving Global Optimization Problems, IEEE Third International Conference on Digital Information Management (ICDIM 2008), London, IEEE Press, USA, ISBN 978-1-4244-2917-2, pp. 18-24, 2008.
153. Swagatam Das, Sambarta Dasgupta, Arijit Biswas, *Ajith Abraham* and Amit Konar, On Stability of the Chemotactic Dynamics in Bacterial Foraging Optimization Algorithm, International Conference on Soft Computing as Transdisciplinary Science and Technology (CSTST 2008), Paris, France, ACM Press, ISBN 978-1-60558-046-3, pp. 245-251, 2008.
154. Arijit Biswas, Swagatam Das, Sambarta Dasgupta and *Ajith Abraham* , Stability Analysis of the Reproduction Operator in Bacterial foraging Optimization, International Conference on Soft Computing as Transdisciplinary Science and Technology (CSTST 2008), Paris, France, ACM Press, ISBN 978-1-60558-046-3, pp. 568-575, 2008.
155. *Ajith Abraham* , Youakim Badr, Hongbo Liu and Crina Grosan, A Multi-Swarm Approach to Neighbor Selection in Peer-to-Peer Networks, International Conference on Soft Computing as Transdisciplinary Science and Technology (CSTST 2008), Paris, France, ACM Press, ISBN 978-1-60558-046-3, pp. 178-184, 2008.
156. Millie Pant, Radha Thangaraj and *Ajith Abraham* , Optimal Tuning of PI Controller Using Nature Inspired Heuristics, Eighth International Conference on Intelligent Systems Design and Applications - ISDA 2008, Taiwan, IEEE CS Press, USA, ISBN 978-0-7695-3382-7, pp. 420-425, 2008.
157. Kaushik Suresh, Sayan Ghosh, Debarati Kundu, Abhirup Sen, Swagatam Das and *Ajith Abraham* , Inertia-Adaptive Particle Swarm Optimizer for Improved Global Search, Eighth International Conference on Intelligent Systems Design and Applications - ISDA 2008, Taiwan, IEEE CS Press, USA, ISBN 978-0-7695-3382-7, pp. 253-258, 2008.

158. Sarina Sulaiman, Siti Mariyam Shamsuddin, *Ajith Abraham* and Shahida Sulaiman, Rough Set Granularity in Mobile Web Pre-Caching, Eighth International Conference on Intelligent Systems Design and Applications - ISDA 2008, Taiwan, IEEE CS Press, USA, ISBN 978-0-7695-3382-7, pp. 587-592, 2008.
159. Rafael Falcon, Benoit Depaire, Koen Vanhoof and *Ajith Abraham* , Towards a Suitable Reconciliation of the Findings in Collaborative Fuzzy Clustering, Eighth International Conference on Intelligent Systems Design and Applications - ISDA 2008, Taiwan, IEEE CS Press, USA, ISBN 978-0-7695-3382-7, pp. 652-657, 2008.
160. Mostafa El-Hosseini, Aboul Ella Hassanien, *Ajith Abraham* , Hameed Al-Qaheri, Cultural-Based Genetic Algorithm: Design and Real World Applications, Eighth International Conference on Intelligent Systems Design and Applications - ISDA 2008, Taiwan, IEEE CS Press, USA, ISBN 978-0-7695-3382-7, pp. 488-493, 2008.
161. Mostafa El-Hosseini, Aboul Ella Hassanien, *Ajith Abraham* , Hameed Al-Qaheri, Genetic Annealing Optimization: Design and Real World Applications, Eighth International Conference on Intelligent Systems Design and Applications - ISDA 2008, Taiwan, IEEE CS Press, USA, ISBN 978-0-7695-3382-7, pp. 183-188, 2008.
162. Hameed Al-Qaheri, Shariffah Zamoon, Aboul Ella Hassanien and *Ajith Abraham* , Rough Set Generating Prediction Rules for Stock Price Movement, 2nd European Modeling Symposium, (EMS 2008), Liverpool, UK, IEEE CS Press, USA, ISBN 978-0-7695-3325-4, pp. 111-116, 2008.
163. Hongbo Liu, *Ajith Abraham* and Hong Ye, Extracting Multi-Knowledge from fMRI Data through Swarm-based Rough Set Reduction, The 3rd International Workshop on Hybrid Artificial Intelligence Systems, Lecture notes in Computer Science 5271, Springer Verlag, Germany, ISBN 978-3-540-87655-7, pp. 281-288, 2008.
164. Millie Pant, Radha Thangaraj, Deepti Rani, *Ajith Abraham* and Dinesh Kumar Srivastava, Estimation Using Differential Evolution for Optimal Crop Plan, The 3rd International Workshop on Hybrid Artificial Intelligence Systems, Lecture notes in Computer Science 5271, Springer Verlag, Germany, ISBN 978-3-540-87655-7, pp. 289-297, 2008.
165. Swagatam Das, Sambarta Dasgupta, Arijit Biswas and *Ajith Abraham* , Automatic Circle Detection on Images Using Annealed Differential Evolution, Eighth International Conference on Hybrid Intelligent Systems - HIS 2008, Barcelona, IEEE CS Press, USA, pp. 684-689, 2008.
166. Pavel Kromer, Vaclav Snasel, Jan Platos and *Ajith Abraham* , Implicit User Modelling Using Hybrid Meta-heuristics, Eighth International Conference on Hybrid Intelligent Systems - HIS 2008, Barcelona, IEEE CS Press, USA, IEEE CS Press, USA, pp. 42-47, 2008.
167. Anazida Zainal, Mohd Aizaini Maarof, Siti Mariyam Shamsuddin and *Ajith Abraham* , Ensemble of One-class Classifiers for Network Intrusion Detection System, Fourth International Conference on information Assurance and Security (IAS 2008), Italy, IEEE Computer Society Press, USA, pp. 180-185, 2008.
168. Vaclav Snasel, Jan Platos, Pavel Kromer and *Ajith Abraham* , Matrix Factorization Approach for Feature Deduction and Design of Intrusion Detection Systems, Fourth International Conference on information Assurance and Security (IAS 2008), Italy, IEEE Computer Society Press, USA, pp. 172-179, 2008.
169. Millie Pant, Radha Thangaraj and *Ajith Abraham* , Particle Swarm Optimization Using Adaptive Mutation, 2nd International Workshop on Evolutionary Techniques in Data-processing (DEXA'08/ETID '08), IEEE Computer Society Press, USA, ISBN 978-0-7695-3299-8, pp. 519-523, 2008.
170. Millie Pant, Radha Thangaraj, Veda Pal Singh and *Ajith Abraham* , Particle Swarm Optimization Using Sobol Mutation, International Conference on Emerging Trends in Engineering and Technology, ICETET 2008, Nagpur, IEEE Computer Society Press, USA, ISBN 978-0-7695-3267-7, pp. 367-372, 2008.

171. Sambarta Dasgupta, Arijit Biswas, Swagatam Das and Ajith Abraham , Automatic Circle Detection on Images with an Adaptive Bacterial Foraging Algorithm, 2008 Genetic and Evolutionary Computation Conference, GECCO 2008, ACM Press, ISBN: 978-1-60558-130-9, pp. 1695-1696, 2008.
172. *Ajith Abraham* , Arijit Biswas, Swagatam Das and Sambarta Dasgupta, Design of Fractional Order PID Controllers Using Improved Differential Evolution, 2008 Genetic and Evolutionary Computation Conference, GECCO 2008, ACM Press, ISBN: 978-1-60558-130-9, pp. 1445-1452, 2008.
173. Millie Pant, Radha Thangaraj and *Ajith Abraham* , A New Quantum Behaved Particle Swarm Optimization Algorithm, 2008 Genetic and Evolutionary Computation Conference, GECCO 2008, ACM Press, ISBN: 978-1-60558-130-9, pp. 87-94, 2008.
174. Suhail Owais, Vaclav Snasel, Pavel Kromer, and *Ajith Abraham* , Survey: Using Genetic Algorithm Approach in Intrusion Detection Systems Techniques, 7th International Conference on Computer Information Systems and Industrial Management Applications (CISIM'08), IEEE Computer Society press, USA, ISBN 978-0-7695-3184-7, pp. 296-303, 2008.
175. Divyata Dal, Siby Abraham, *Ajith Abraham* , Sugata Sanyal and Mukund Sanglikar, Evolution induced Secondary Immunity: An Artificial Immune System based Intrusion Detection System, 7th International Conference on Computer Information Systems and Industrial Management Applications (CISIM'08), IEEE Computer Society press, USA, ISBN 978-0-7695-3184-7, pp. 61-66, 2008.
176. Santi Caballe, Fatos Xhafa, Thanasis Daradoumis, *Ajith Abraham* , Efficient Interaction Analysis for an Effective Provision of Knowledge about the Discussion Process to CSCL Practices , 7th International Conference on Computer Information Systems and Industrial Management Applications (CISIM'08), IEEE Computer Society press, USA, ISBN 978-0-7695-3184-7, pp. 265-270, 2008.
177. Keshav Dahal, Alamgir Hossain, Benzy Varghese, *Ajith Abraham* , Fatos Xhafa, Atanasi Daradoumis, Scheduling in Multiprocessor System Using Genetic Algorithms, 7th International Conference on Computer Information Systems and Industrial Management Applications (CISIM'08), IEEE Computer Society press, USA, ISBN 978-0-7695-3184-7, pp. 277-282, 2008.
178. Millie Pant, Radha Thangaraj and *Ajith Abraham* , Particle Swarm Based Meta-heuristics for Function Optimization and Engineering Applications, 7th International Conference on Computer Information Systems and Industrial Management Applications (CISIM'08), IEEE Computer Society press, USA, ISBN 978-0-7695-3184-7, pp. 80-86, 2008.
179. Fatos Xhafa, Bernat Duran, *Ajith Abraham* and Keshav Dahal, Tuning Struggle Strategy in Genetic Algorithms for Scheduling in Computational Grids, 7th International Conference on Computer Information Systems and Industrial Management Applications (CISIM'08), IEEE Computer Society press, USA, ISBN 978-0-7695-3184-7, pp. 271-276, 2008.
180. *Ajith Abraham* and Hongbo Liu, A Rough Set Reduction Scheme for Support Vector Machines and its Application in Cognitive State Classification, IEEE International Conference on Intelligence and Security Informatics (IEEE ISI 2008), IEEE International Conference on Intelligence and Security Informatics (IEEE ISI 2008), IEEE Press, USA, ISBN 978-1-4244-2414-6, pp. 200-202, 2008.
181. *Ajith Abraham* , Arijit Biswas, Sambarta Dasgupta and Swagatam Das, Analysis of Reproduction Operator in Bacterial Foraging Optimization, IEEE Congress on Evolutionary Computation CEC 2008, IEEE World Congress on Computational Intelligence, WCCI 2008, IEEE Press, USA, ISBN 978-1-4244-1823-7, pp. 1476-1483, 2008.
182. Aboul Hassanien, Ajith Abraham , James Peters, Gerald Schaefer, An Overview of Rough-hybrid Approaches in Image Processing, IEEE Conference on Fuzzy Systems, FUZZ IEEE -08, IEEE World Congress on Computational Intelligence, WCCI 2008, IEEE Press, USA, ISBN 978-1-4244-1819-0, pp. 2135-2142, 2008.
183. Sambarta Dasgupta, Arijit Biswas, Swagatam Das and *Ajith Abraham* , The Population Dynamics of Differential Evolution: a Mathematical Model, IEEE Congress on Evolutionary

- Computation CEC 2008, IEEE World Congress on Computational Intelligence, WCCI 2008, IEEE Press, USA, ISBN 978-1-4244-1823-7, pp. 1439-1446, 2008.
184. Millie Pant, Radha Thangaraj, Crina Grosan and *Ajith Abraham* , Improved Particle Swarm Optimization with Low-discrepancy Sequences, IEEE Congress on Evolutionary Computation CEC 2008, IEEE World Congress on Computational Intelligence, WCCI 2008, IEEE Press, USA, ISBN 978-1-4244-1823-7, pp. 3016-3023, 2008.
  185. Mingyan Zhao, *Ajith Abraham* , Crina Grosan and Hongbo Liu, A Fuzzy Particle Swarm Approach for Multiobjective Quadratic Assignment Problems, Second Asia International Conference on Modeling and Simulation, AMS 2008, IEEE Computer Society Press, USA, ISBN 978-0-7695-3136-6, pp. 516-521, 2008.
  186. Kjetil Haslum, *Ajith Abraham* and Svein Knapskog, HiNFRA: Hierarchical Neuro-Fuzzy Learning for Online Risk Assessment, Second Asia International Conference on Modeling and Simulation, AMS 2008, IEEE Computer Society Press, USA, ISBN 978-0-7695-3136-6, pp. 631-636, 2008.
  187. Millie Pant, Radha Thangaraj and *Ajith Abraham* , Optimization of a Kraft Pulping System: Using Particle Swarm Optimization and Differential Evolution, Second Asia International Conference on Modeling and Simulation, AMS 2008, IEEE Computer Society Press, USA, ISBN 978-0-7695-3136-6, pp. 637-641, 2008.
  188. Sarina Sulaiman, Siti Mariyam Shamsuddin, Fadni Forkan and *Ajith Abraham* , Intelligent Web Caching Using Neurocomputing and Particle Swarm Optimization Algorithm, Second Asia International Conference on Modeling and Simulation, AMS 2008, IEEE Computer Society Press, USA, ISBN 978-0-7695-3136-6, pp. 642-647, 2008.
  189. Crina Grosan and *Ajith Abraham* , Generating Uniformly Distributed Pareto Optimal Points for Constrained and Unconstrained Multicriteria Optimization, The 6th International Conference on Informatics and Systems (INFOS 2008), Cairo, Egypt, ISBN 977-403-290-X, pp. 73-77, 2008.
  190. Crina Grosan, *Ajith Abraham* and Bjarne Helvik, Building Multiobjective Resilient Networks, Tenth International Conference on Computer Modeling and Simulation, UKSiM/EUROSiM 2008, Cambridge, UK, IEEE Computer Society Press, USA, ISBN 978-0-7695-3114-8, pp. 204-209, 2008.
  191. Kjetil Haslum, *Ajith Abraham* and Svein Knapskog, Fuzzy Online Risk Assessment for Distributed Intrusion Prediction and Prevention Systems, Tenth International Conference on Computer Modeling and Simulation, UKSiM/EUROSiM 2008, Cambridge, UK, IEEE Computer Society Press, USA, ISBN 978-0-7695-3114-8, pp. 216-223, 2008.
  192. Sarina Sulaiman, Siti Shamsuddin, *Ajith Abraham* , An Implementation of Rough Set in Optimizing Mobile Web Caching Performance, Tenth International Conference on Computer Modeling and Simulation, UKSiM/EUROSiM 2008, Cambridge, UK, IEEE Computer Society Press, USA, ISBN 978-0-7695-3114-8, pp. 655-660, 2008.
  193. *Ajith Abraham* , Pavel Kromer, Vaclav Snasel and Nabil Ouddane, Evolving Turbo Code Interleavers by Genetic Algorithm, Second International Conference on Complex, Intelligent and Software Intensive Systems (CISIS-2008), Barcelona, Spain, IEEE Computer Society Press, ISBN 978-0-7695-3109-1, pp. 155-161, 2008.
  194. Sambarta Dasgupta, Arijit Biswas, *Ajith Abraham* and Swagatam Das, Adaptive Computational Chemotaxis in Bacterial Foraging Algorithm, Second International Conference on Complex, Intelligent and Software Intensive Systems (CISIS-2008), Barcelona, Spain, IEEE Computer Society Press, ISBN 978-0-7695-3109-1, pp. 64-71, 2008.
  195. Alakananda Bhattacharya, Amit Konar, Swagatam Das, Crina Grosan and *Ajith Abraham* , Hardware Software Partitioning Problem in Embedded System Design Using Particle Swarm Optimization Algorithm, Second International Conference on Complex, Intelligent and Software Intensive Systems (CISIS-2008), Barcelona, Spain, IEEE Computer Society Press, ISBN 978-0-7695-3109-1, pp. 171-176, 2008.

196. *Ajith Abraham*, Benxian Yue, Chenjing Xian, Hongbo Liu and Millie Pant, Multi-objective Peer-to-Peer Neighbor-Selection Strategy Using Genetic Algorithm, 14th IEEE International Conference on High Performance Computing (HiPC 2007), Springer Verlag, Lecture Notes in Computer Science Vol. 4873, Germany, pp. 443-451, 2007.
197. Crina Grosan and *Ajith Abraham*, Hybrid line search for multiobjective optimization, 2007 International Conference on High Performance Computing and Communications (HPCC07), Houston, USA, Springer Verlag, Germany, R. Perrott et al. (Eds.): HPCC 2007, LNCS 4782, pp. 62-73, 2007.
198. Sandipan Dey, *Ajith Abraham*, Sugata Sanyal, An LSB Data Hiding Technique Using Natural Numbers, IEEE Third International Conference on Intelligent information hiding and Multimedia Signal Processing, Taiwan, IEEE Computer Society press, USA, ISBN 0-7695-2994-1, pp. 473-476, 2007.
199. Crina Grosan and *Ajith Abraham*, Exploration of Multiple Roots for a Polynomial System, IEEE International Conference on Digital Information Management, Lyon, France, IEEE Press, USA, ISBN 1-4244-1476-8, pp. 133-137, 2007.
200. Hongbo Liu, *Ajith Abraham*, Crina Grosan and Ningning Li, A Novel Variable Neighborhood Particle Swarm Optimization for Multi-objective Flexible Job-shop Scheduling Problems, IEEE International Conference on Digital Information Management, Lyon, France, IEEE Press, USA, ISBN 1-4244-1476-8, pp. 138-145, 2007.
201. *Ajith Abraham*, Amit Konar, Nayan Samal and Swagatam Das, Stability Analysis of the Ant System Dynamics with Non-uniform Pheromone Deposition Rules, IEEE Congress in Evolutionary Computation (CEC 2007), IEEE press, USA, ISBN 1-4244-1340-0, pp. 1103-1108, 2007.
202. Vitorino Ramos, Carlos Fernandes, Rosa Agostinho and *Ajith Abraham*, Computational Chemotaxis in Ants and Bacteria over Dynamic Environments, IEEE Congress in Evolutionary Computation (CEC 2007), IEEE press, USA, ISBN 1-4244-1340-0, pp. 1009-1117, 2007.
203. Nayan Samal, Amit Konar, Swagatam Das and *Ajith Abraham*, A Closed Loop Stability Analysis and Parameter Selection of the Particle Swarm Optimization Dynamics for Faster Convergence, IEEE Congress in Evolutionary Computation (CEC 2007), IEEE press, USA, ISBN 1-4244-1340-0, pp. 1769-1776, 2007.
204. Arijit Biswas, Sambarta Dasgupta, Swagatam Das, and *Ajith Abraham*, Synergy of PSO and Bacterial Foraging Optimization: A Comparative Study on Numerical Benchmarks, Second International Symposium on Hybrid Artificial Intelligent Systems (HAIS 2007), Advances in Softcomputing Series, Springer Verlag, Germany, E. Corchado et al. (Eds.), Innovations in Hybrid Intelligent Systems, pp. 255-263, 2007.
205. Millie Pant, Radha Thangaraj and *Ajith Abraham*, A New PSO Algorithm with Crossover Operator for Global Optimization Problems, Synergy of PSO and Bacterial Foraging Optimization: A Comparative Study on Numerical Benchmarks, Second International Symposium on Hybrid Artificial Intelligent Systems (HAIS 2007), Advances in Softcomputing Series, Springer Verlag, Germany, E. Corchado et al. (Eds.), Innovations in Hybrid Intelligent Systems, pp. 215-222, 2007.
206. Alvaro Herrero, Emilio Corchado, Maria A. Pellicer, and *Ajith Abraham*, Hybrid Multi Agent-Neural Network Intrusion Detection with Mobile Visualization, Second International Symposium on Hybrid Artificial Intelligent Systems (HAIS 2007), Advances in Softcomputing Series, Springer Verlag, Germany, E. Corchado et al. (Eds.), Innovations in Hybrid Intelligent Systems, pp. 320-328, 2007.
207. Millie Pant, Radha Thangaraj and *Ajith Abraham*, A New Particle Swarm Optimization Algorithm Incorporating Reproduction Operator for Solving Global Optimization Problems, 7th International Conference on Hybrid Intelligent Systems, Kaiserslautern, Germany, IEEE Computer Society press, USA, ISBN 07695-2662-4, pp. 144-149, 2007.
208. Crina Grosan and *Ajith Abraham*, Exploration of Pareto Frontier Using a Fuzzy Controlled Hybrid Line Search, 7th International Conference on Hybrid Intelligent Systems, Kaiserslautern, Germany, IEEE Computer Society press, USA, ISBN 07695-2662-4, pp. 366-371, 2007.

209. Kjetil Haslum, *Ajith Abraham* and Svein Knapskog, DIPS: A Framework for Distributed Intrusion Prediction and Prevention Using Hidden Markov Models and Online Fuzzy Risk Assessment, Third International Symposium on Information Assurance and Security, IEEE Computer Society press, USA, ISBN 0-7695-2876-7, pp. 183-188, 2007.
210. Sandipan Dey, *Ajith Abraham*, Sugata Sanyal, An LSB Data Hiding Technique Using Prime Numbers, Third International Symposium on Information Assurance and Security, IEEE Computer Society press, USA, ISBN 0-7695-2876-7, pp. 101-106, 2007.
211. *Ajith Abraham*, Swagatam Das and Amit Konar, Kernel Based Automatic Clustering Using Modified Particle Swarm Optimization Algorithm, 2007 Genetic and Evolutionary Computation Conference, GECCO 2007, ACM Press, Dirk Thierens et al. (Eds.), ISBN 978-1-59593-698-1, pp. 2-9, 2007.
212. Lin Wang, Bo Yang, Zhenxiang Chen, *Ajith Abraham*, and Lizhi Peng, A Novel Improvement of Neural Network Classification Using Further Division of Partition Space, International Work-conference on the Interplay between Natural and Artificial Computation (IWINAC 2007), Lecture Notes in Computer Science, Springer Verlag, Germany, J. Mira and J.R. Alvarez (Eds.) LNCS 4527, Part I, pp. 214-223, 2007.
213. Benxian Yue, Weihong Yao, *Ajith Abraham* and Hongbo Liu, A New Rough Set Reduct Algorithm Based on Particle Swarm Optimization, International Work-conference on the Interplay between Natural and Artificial Computation (IWINAC 2007), Lecture Notes in Computer Science, J. Mira and J.R. Alvarez (Eds.), LNCS 4527, Part I, pp. 397-406, 2007.
214. Shichang Sun, *Ajith Abraham*, Guiyong Zhang and Hongbo Liu, A Particle Swarm Optimization Algorithm for Neighbor Selection in Peer-to-Peer Networks, 6th International Conference on Computer Information Systems and Industrial Management Applications, IEEE Computer Society Press, pp. 166-172, 2007.
215. Godfrey Onwubolu, Petr Buryan, Sitaram Garimella, Visagaperuman Ramachandran, Viti Buadromo and *Ajith Abraham*, Self organizing Data Mining for Weather Forecasting, Proceedings of the First European Conference on Data Mining, Lisbon, Portugal, ISBN: 978-972-8924-40-9, IADIS Press, pp. 81-88, 2007.
216. Crina Grosan and *Ajith Abraham*, Intelligent Data Analysis Using Multiple Criteria Decision Making, Proceedings of the First European Conference on Data Mining, Lisbon, Portugal, ISBN: 978-972-8924-40-9, IADIS Press, pp. 89-94, 2007.
217. Godfrey Onwubolu, Petr Buryan and *Ajith Abraham*, Self organizing Data Mining Using Enhanced Group Method Data Handling Approach, Proceedings of the First European Conference on Data Mining, Lisbon, Portugal, ISBN: 978-972-8924-40-9, IADIS Press, pp. 170-175, 2007.
218. Hongbo Liu, *Ajith Abraham*, and Jianying Zhang, A Particle Swarm Approach to Quadratic Assignment Problems, 11th Online World Conference on Soft Computing in Industrial Applications (WSC11), Springer Verlag, Germany, Soft Computing in Industrial Applications, Vol. 39, A. Saad et al. (Eds.), Springer Verlag, Germany, pp. 213-222, 2007.
219. Bhavyesh Divecha, *Ajith Abraham*, Crina Grosan and Sugata Sanyal, Analysis of Dynamic Source Routing and Destination-Sequenced Distance-Vector Protocols for Different Mobility models, First IEEE Asia International Conference on Modeling and Simulation, AMS-07, Thailand, IEEE Computer Society Press, ISBN 0-7695-2845-7, pp. 224-229, 2007.
220. Crina Grosan and *Ajith Abraham*, Solving Shortest Capacitated Path Problem Using a Bi-Objective Heuristic Approach, First IEEE Asia International Conference on Modeling and Simulation, AMS-07, Thailand, IEEE Computer Society Press, ISBN 0-7695-2845-7, pp. 427-432, 2007.
221. Crina Grosan and *Ajith Abraham*, Modified Line Search Method for Global Optimization, First IEEE Asia International Conference on Modeling and Simulation, AMS-07, Thailand, IEEE Computer Society Press, ISBN 0-7695-2845-7, pp. 415-420, 2007.
222. Ayu Tiwari, Sudip Sanyal, *Ajith Abraham*, Svein Johan Knapskog and Sugata Sanyal, A Multifactor Security Protocol For Wireless Payment-Secure Web Authentication using Mobile

- Devices, IADIS International Conference, Applied Computing 2007, Salamanca, Spain, Nuno Guimares and Pedro Isaias (Eds.), ISBN 978-972-8924-30-0, pp. 160-167, 2007.
223. Swagatam Das and *Ajith Abraham*, Synergy of Particle Swarm Optimization with Differential Evolution Algorithms for Intelligent Search and Optimization, Proceedings of the Hybrid Artificial Intelligence Systems Workshop (HAIS06), Javier Bajo et al. (Eds.), Salamanca, Spain, ISBN 84-934181-9-6, pp. 89-99, 2006.
  224. Crina Grosan, *Ajith Abraham* and Bjarne Helvik, Multiobjective Evolutionary Algorithms for Scheduling Jobs on Computational Grids, International Conference on Applied Computing 2007, Salamanca, Spain, Nuno Guimares and Pedro Isaias (Eds.), ISBN 978-972-8924-30-0, pp. 459-463, 2007.
  225. Crina Grosan, *Ajith Abraham* and Stefan Tigan, Drug Design Using a Multi-Input Multi- Output Neuro-Fuzzy System, 8th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC'06), Timisoara, Romania, IEEE CS Press, pp. 365-371, 2006.
  226. Vijayraman Kumar, Johnson Thomas and *Ajith Abraham*, Secure Directed Diffusion Routing Protocol for Sensor Networks Using the LEAP Protocol, NATO Advanced Research Workshop on Information Security Assurance and Security (NATO-ARWISA05), NATO Security through Science Series, D: Information and Communications Security - Vol. 6, J.P. Thomas and M. Essaïdi (Eds.), ISBN 1-58603-678-5, IOS Press, Netherlands, pp. 183-203, 2006.
  227. Kwangcheol Shin, *Ajith Abraham*, and Sang Yong Han, Improving Text Categorization by Removing Outliers from Training Set, Seventh International Conference on Intelligent Text Processing and Computational Linguistics, A. Gelbukh (Ed.), LNCS 3878, Springer Verlag, Germany, pp. 563-566, 2006.
  228. Crina Grosan, *Ajith Abraham*, Stefan Tigan, Tae-Gyu Chang and Dong Hwan Kim, Evolving Neural Networks for Pharmaceutical Research, International Conference on Hybrid Information Technology (ICHIT'06), IEEE Press, IEEE CS Press, Korea, pp. 13-19, 2006.
  229. Swagatam Das, *Ajith Abraham* and Subir Kumar Sarkar, A Hybrid Rough Set Particle Swarm Algorithm for Image Pixel Classification, Sixth International Conference on Hybrid Intelligent Systems and Fourth Conference on Neuro-Computing and Evolving Intelligence (HIS-NCEI 2006), Auckland, New Zealand, IEEE Computer Society Press, USA, ISBN 0-7695-2662-4, Paper reference no. 26, 2006.
  230. Crina Grosan, *Ajith Abraham* and Alexander Gelbukh, Evolutionary Method for Nonlinear Systems of Equations, 5th Mexican International Conference on Artificial Intelligence, Mexico, Lecture Notes in Computer Science, Springer Verlag, Germany, A. Gelbukh and C.A. Reyes-Garcia (Eds.): MICAI 2006, LNAI 4293, pp.283-293, 2006.
  231. Hongbo Liu, *Ajith Abraham*, Okkyung Choi and Seong-Hwan Moon, Variable Neighborhood Particle Swarm Optimization for Multi-objective Flexible Job-shop Scheduling Problems, The Sixth International Conference on Simulated Evolution And Learning (SEAL'06), China, Springer Verlag, Germany, Lecture Notes in Computer Science, T.D.Wang et al. (Eds.), LNCS 4247, pp. 197-204, 2006.
  232. Yuehui Chen, Lizhi Peng, *Ajith Abraham*, Gene Expression Profiling Using Flexible Neural Trees, 7th International Conference on Intelligent Data Engineering and Automated Learning (IDEAL'06), Burgos, Spain, E. Corchado et al. (Eds.), Springer Verlag, Germany, Lecture Notes in Computer Science, LNCS 4224, pp.1121-1128, 2006.
  233. Kwangcheol Shin, *Ajith Abraham* and SangYong Han, Two Phase Semi-supervised Clustering Using Background Knowledge, 7th International Conference on Intelligent Data Engineering and Automated Learning (IDEAL'06), Burgos, Spain, Springer Verlag, Germany, E. Corchado et al. (Eds.), Lecture Notes in Computer Science, LNCS 4224, pp. 707-712, 2006.
  234. Swagatam Das, *Ajith Abraham* and Amit Konar, Spatial Information based Image Segmentation Using a Modified Particle Swarm Optimization Algorithm, Sixth International Conference on Intelligent Systems Design and Applications, ISDA'06, IEEE CS Press, ISBN 07695-2528-8, Volume II, pp. 438-444, 2006.

235. Hongbo Liu and *Ajith Abraham* , Particle Swarm Approach to Scheduling Workflow Applications in Distributed Data-Intensive Computing Environments, Sixth International Conference on Intelligent Systems Design and Applications, ISDA'06, IEEE CS Press, ISBN 07695-2528-8, Volume II, pp. 661-666, 2006.
236. Kwangcheol Shin, *Ajith Abraham* and Sang Yong Han, Enhanced Centroid-Based Classification Based on Refining Training Dataset, Ninth International Conference on Text Speech and Dialogue, TSD 2006, Brno, Czech Republic, Petr Sojka, Ivan Kopecek and Karel Pala (Eds.), Springer Verlag, Germany, Lecture Notes on Artificial Intelligence 4188, pp.159-163, 2006.
237. Yuehui Chen, Lizhi Peng, and *Ajith Abraham* , Stock Index Modeling using Hierarchical Radial Basis Function Networks, 10th International Conference on Knowledge-Based and Intelligent Information and Engineering Systems, Springer Verlag, Germany, B. Gabrys, R.J. Howlett, and L.C. Jain (Eds.): Part III, Lecture Notes on Artificial Intelligence 4253, pp. 398-405, 2006.
238. *Ajith Abraham* , Hongbo Liu, Weishi Zhang and Tae-Gyu Chang, Job Scheduling on Computational Grids Using Fuzzy Particle Swarm Algorithm, 10th International Conference on Knowledge-Based and Intelligent Information and Engineering Systems, Springer Verlag, Germany, B. Gabrys, R.J. Howlett, and L.C. Jain (Eds.): Part II, Lecture Notes on Artificial Intelligence 4252, pp.500-507, 2006.
239. Crina Grosan, *Ajith Abraham* , Stefan Tigan and Tae-Gyu Chang, How to Solve a Multi-criterion Problem for which Pareto Dominance Relationship Cannot be Applied? A Case Study from Medicine, 10th International Conference on Knowledge-Based and Intelligent Information and Engineering Systems (KES'06), Springer Verlag, B. Gabrys, R.J. Howlett, and L.C. Jain (Eds.): Part III, Lecture Notes in Artificial Intelligence 4253, pp. 1128-1135, 2006.
240. Crina Grosan, *Ajith Abraham* , Tae-Gyu Chang, Evolutionary Elementary Cooperative Strategy for Global Optimization, 10th International Conference on Knowledge-Based and Intelligent Information and Engineering Systems (KES'06), Springer Verlag, B. Gabrys, R.J. Howlett, and L.C. Jain (Eds.): Part III, Lecture Notes on Artificial Intelligence 4253, pp. 677-685, 2006.
241. *Ajith Abraham* , Swagatam Das and Amit Konar, Document Clustering Using Differential Evolution, IEEE Congress in Evolutionary Computation, World Congress in Computational Intelligence, IEEE press, ISBN 0-7803-9489-5, pp. 6248-6255, 2006.
242. *Ajith Abraham* , Hongbo Liu, and Tae-Gu Chang, Variable Neighborhood Particle Swarm Optimization Algorithm, Genetic and Evolutionary Computation Conference (GECCO-2006), Seattle, USA, Late Breaking Papers, CD Proceedings, J. Grahl (Ed.), 2006.
243. Crina Grosan and *Ajith Abraham* , Solving Nonlinear Equation Systems Using Evolutionary Algorithms, Genetic and Evolutionary Computation Conference (GECCO-2006), Seattle, USA, Late Breaking Papers, CD Proceedings, J. Grahl (Ed.), 2006.
244. Crina Grosan and *Ajith Abraham* , A Simple Strategy for Nonlinear Optimization. Third International Conference on Neural, Parallel and Scientific Computations, Atlanta, Dynamic Publishers Inc. USA, pp. 44-48, 2006.
245. Arpad Kelemen, Yulan Liang and *Ajith Abraham* , Bayesian Dynamic Linear Models for Predicting Temporal Gene Expression Profiles, IASTED International Conference on Intelligent Systems and Control, Honolulu, USA, pp. 200-205, 2006.
246. Yuehui Chen, Lizhi Peng and *Ajith Abraham* , Programming Hierarchical Takagi Sugeno Fuzzy Systems, The 2nd International Symposium on Evolving Fuzzy Systems (EFS2006), IEEE Press, pp. 157-162, 2006.
247. Yuehui Chen, Jin Zhou and *Ajith Abraham* , Estimation of Distribution Algorithm for Optimization of Neural networks for Intrusion Detection System, The Eight International Conference on Artificial Intelligence and Soft Computing (ICAISC2006), Springer Verlag, L. Rutkowski et al.(Eds.), Lecture Notes on Artificial Intelligence 4029, pp. 9-18, 2006.
248. Yuehui Chen, Bo Yang and *Ajith Abraham* , Optimal Design of Hierarchical Wavelet Networks for Time-series Forecasting, The 14th European Symposium on Artificial Neural Networks,

- Bruges, Belgium, Lecture Notes in Computer Science, Springer Verlag, Germany, pp. 155-160, 2006.
249. Yuehui Chen, Lizhi Peng and *Ajith Abraham* , Hierarchical Radial Basis Function Neural Networks for Classification Problems, IEEE International Symposium on Neural Networks, China, Lecture Notes in Computer Science, Volume 3971 / 2006, Jun Wang et al. (Eds.), Springer Verlag, Germany, pp. 873-879, 2006.
  250. Yuehui Chen, Lizhi Peng and *Ajith Abraham* , Exchange Rate Forecasting Using Flexible Neural Tree, IEEE International Symposium on Neural Networks, China, Lecture Notes in Computer Science, Volume 3973/2006, Jun Wang et al. (Eds.), Springer Verlag, Germany, pp. 518-523, 2006.
  251. Arijit Bhattacharya, *Ajith Abraham* , Crina Grosan, Pandian Vasant and Sang Yong Han, Meta-Learning Evolutionary Artificial Neural Network for Selecting Flexible Manufacturing Systems under Disparate Level-of-Satisfaction of Decision Maker, IEEE International Symposium on Neural Networks, China, Lecture Notes in Computer Science, Volume 3973/2006, Jun Wang et al. (Eds.), Springer Verlag, Germany, pp. 891-897, 2006.
  252. KwangCheol Shin, *Ajith Abraham* and Sangyong Han, Self Organizing Sensor Networks Using Intelligent Clustering, International Conference on Computational Science and Applications, UK, M. Gavrilova et al. (Eds.), Lecture Notes in Computer Science (LNCS 3983), Springer Verlag, Germany, pp.40-49, 2006.
  253. Crina Grosan, *Ajith Abraham* and Monica Chis, Computational Intelligence for Light Weight Intrusion Detection Systems. International Conference on Applied Computing, San Sebastian, N.Guimaraes et al. (Eds.), ISBN: 9728924097, pp. 538-542, 2006.
  254. Okkyung Choi, Sangyong Han and *Ajith Abraham* , Semantic Matchmaking Services Model for the intelligent Web Services, International Conference on Computational Science and Applications, UK, IEE Press, UK, pp. 146-148, 2006.
  255. Hongbo Liu and *Ajith Abraham* , Role of Chaos in Swarm Intelligence: A Preliminary Analysis, WSC10: 10th Online World Conference on Soft Computing in Industrial Applications, September 19th - October 7th, Springer Verlag, Germany, Advances in Soft Computing , Vol. 36, Tiwari, A.; Knowles, J.; Avineri, E.; Dahal, K. and Roy, R. (Eds.), ISBN: 978-3-540-29123-7, 2006.
  256. Yuehui Chen, Shuyan Jiang and *Ajith Abraham* , Face Recognition Using DCT and Hybrid Flexible Neural Tree, The Second International Conference on Neural Networks and Brain (ICNNB'05), Beijing, China, pp. 1459-1463, 2005.
  257. Hongbo Liu and *Ajith Abraham* , Fuzzy Turbulent Particle Swarm Optimization, Fifth International Conference on Hybrid Intelligent Systems, Brazil, IEEE CS Press, ISBN 0-7695-2457-5, pp. 445-450, 2005.
  258. Crina Grosan and *Ajith Abraham* , Ensemble of Genetic Programming Models for Designing Reactive Power Controllers, Fifth International Conference on Hybrid Intelligent Systems, Brazil, IEEE CS Press, ISBN 0-7695-2457-5, pp. 277-282, 2005.
  259. Soumya Banarjee, Crina Grosan and *Ajith Abraham* , Emotional Ant Based Modeling of Crowd Dynamics, 7th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC'05), Timisoara, Romania, IEEE CS Press, pp. 279-286, 2005.
  260. Crina Grosan, *Ajith Abraham* and Monica Nicoara, Performance Tuning of Evolutionary Algorithms Using Particle Sub-Swarms, 7th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC'05), Timisoara, Romania, IEEE CS Press, pp. 287-294, 2005.
  261. Crina Grosan, *Ajith Abraham* , Sang Yong Han and Vitorino Ramos, Stock Market Prediction Using Multi Expression Programming, 12th Portuguese Conference on Artificial Intelligence, Portugal, C. Bento, A. Cardoso and G. Dias (Eds.), IEEE Press, pp. 73-78, 2005.
  262. Okkyung Choi, Sangyong Han and *Ajith Abraham* , Extended Semantic Web Services Model for Automatic Integrated Framework, IEEE International Conference on Next Generation Web

- Services Practices, Seoul, Korea, IEEE Computer Society Press, ISBN 0-7695-2452-4, pp. 429-430, 2005.
263. Okkyung Choi, Sangyong Han and *Ajith Abraham* , Semantic Web based Information Query System for the Integration of Semantic Data, IEEE International Conference on Next Generation Web Services Practices, Seoul, Korea, IEEE Computer Society Press, ISBN 0-7695-2452-4, pp. 253-258, 2005.
  264. Dongjoon Kim, Sangkyu Lee, Sangyong Han and *Ajith Abraham* , Improving Web Services Performance Using Priority Allocation Method, IEEE International Conference on Next Generation Web Services Practices, Seoul, Korea, IEEE Computer Society Press, ISBN 0-7695-2452-4, pp. 201-206, 2005.
  265. M. Bilal, Johnson Thomas and *Ajith Abraham* , BPEL Processes for Non-Repudiation Protocols in Web Services, IEEE International Conference on Next Generation Web Services Practices, Seoul, Korea, IEEE Computer Society Press, ISBN 0-7695-2452-4, pp. 299-304, 2005.
  266. *Ajith Abraham* , Crina Grosan, Cong Tran and Lakhmi Jain, A Concurrent Neural Network - Genetic Programming Model for Decision Support Systems, 2005 International Conference on Knowledge Management (ICKM 2005), North Carolina, USA, Knowledge Management Nurturing Culture, Innovation and Technology, S. Hawamdeh (Ed.), World Scientific Press, Singapore, pp. 231-245, 2005.
  267. *Ajith Abraham* , Crina Grosan, Sang Yong Han and Alexander Gelbukh, Evolutionary Multi-objective Optimization Approach for Evolving Ensemble of Intelligent Paradigms for Stock Market Modeling, 4th Mexican International Conference on Artificial Intelligence, Mexico, Alexander Gelbukh et al. (Eds.), Lecture Notes in Computer Science, Springer Verlag, Germany, pp.673-681, 2005.
  268. Crina Grosan, *Ajith Abraham* , Sang Yong Han and Alexander Gelbukh, Hybrid Particle Swarm - Evolutionary Algorithm for Search and Optimization, 4th Mexican International Conference on Artificial Intelligence, Mexico, Alexander Gelbukh et al. (Eds.), Lecture Notes in Computer Science, Springer Verlag, Germany, LNAI 3789, pp.623-632, 2005.
  269. *Ajith Abraham* and Crina Grosan, Genetic Programming Approach for Fault Modeling of Electronic Hardware, 2005 IEEE Congress on Evolutionary Computation (CEC'05), Edinburgh, UK, IEEE Press, ISBN 0-7803-9363-5, pp. 1563-1569, 2005.
  270. Mihai Oltean, Crina Grosan, *Ajith Abraham* and Mario Köppen, Multiobjective Optimization Using Adaptive Pareto Archived Evolution Strategy, 5th International Conference on Intelligent Systems Design and Applications, ISDA'05, Poland, IEEE Computer Society Press, ISBN 0-7695-2286-6, pp. 558-563, 2005.
  271. Soumya Banerjee, Crina Grosan and *Ajith Abraham* , IDEAS: Intrusion Detection Systems Based on Emotional Ants for Sensors, 5th International Conference on Intelligent Systems Design and Applications, ISDA'05 , IEEE Computer Society Press, ISBN 0-7695-2286-6, pp. 344-349, 2005.
  272. Hongbo Liu, Zhanguo Xu and *Ajith Abraham* , Hybrid Fuzzy-Genetic Algorithm Approach for Crew Grouping, 5th International Conference on Intelligent Systems Design and Applications, ISDA'05 , IEEE Computer Society Press, ISBN 0-7695-2286-6, pp. 332-337, 2005.
  273. Ashwini Raina, Shruti Patil, V. Muthukumar and *Ajith Abraham* , HAUNT-24: 24-bit Hierarchical, Application-Confined Unique Naming Technique, 5th International Conference on Intelligent Systems Design and Applications, ISDA'05 Poland, IEEE Computer Society Press, ISBN 0-7695-2286-6, pp. 375-380, 2005.
  274. Yuehui Chen, *Ajith Abraham* , Ju Yang and Bo Yang, Hybrid Methods for Stock Index Modeling, 2005 International Conference on Fuzzy Systems and Knowledge Discovery (FSKD'05), China, Lecture Notes in Computer Science, Volume 3614, Springer Verlag, Germany, pp. 1067-1070, 2005.

275. Crina Grosan, *Ajith Abraham* and Sang Yong Han, MEPIDS: Multi-Expression Programming for Intrusion Detection System, International Work-conference on the Interplay between Natural and Artificial Computation, (IWINAC'05), Spain, Lecture Notes in Computer Science, LNCS 3562, J. Mira and J.R. Alvarez (Eds.), Springer Verlag, Germany, pp. 163-172, 2005.
276. Yuehui Chen and *Ajith Abraham* and Ju Yang, Feature Deduction and Intrusion Detection Using Flexible Neural Trees, Second IEEE International Symposium on Neural Networks (ISNN 2005), Lecture Notes in Computer Science Vol. 3498, J. Wang, X. Liao and Zhang Yi (Eds.) Springer Verlag, Germany, pp. 439 - 446, 2005.
277. Soumya Banerjee, *Ajith Abraham* , Sang Yong Han and P.K. Mahanti, Soft Modeling of Group Dynamics and Behavioral Attributes, The Fourth IEEE International Workshop on Soft Computing as Transdisciplinary Science and Technology (WSTST'05), Japan, Springer Verlag, Germany, pp. 103-112, 2005.
278. Yuehui Chen and *Ajith Abraham* , Hybrid Neurocomputing for Detection of Breast Cancer, The Fourth IEEE International Workshop on Soft Computing as Transdisciplinary Science and Technology (WSTST'05), Japan, Springer Verlag, Germany, pp. 884-892, 2005.
279. Vitorino Ramos and *Ajith Abraham* , ANTIDS: Self Organized Ant Based Clustering Model for Intrusion Detection System, The Fourth IEEE International Workshop on Soft Computing as Transdisciplinary Science and Technology (WSTST'05), Japan, Springer Verlag, Germany, pp. 977-986, 2005.
280. Brent Doeksen, *Ajith Abraham* , Johnson Thomas, Marcin Paprzycki, Real Stock Trading Using Soft Computing Models, IEEE International Conference on Information Technology: Coding and Computing (ITCC'05), USA, IEEE Computer Society, pp. 162-167, 2005.
281. Pranesh Muppala, Johnson Thomas, *Ajith Abraham* , Intelligent Distributed Authentication Scheme for Ad Hoc Wireless Networks, IEEE International Conference on Information Technology: Coding and Computing (ITCC'05), USA, IEEE Computer Society, ISBN 0- 7695-2315-3, pp. 709-714, 2005.
282. Vipul Goyal, Virendra Kumar, Mayank Singh, *Ajith Abraham* and Sugata Sanyal, CompChall: Addressing Password Guessing Attacks, IEEE International Conference on Information Technology: Coding and Computing (ITCC'05), USA, IEEE Computer Society, ISBN 0-7695-2315-3, pp. 739-744, 2005.
283. Vipul Goyal, *Ajith Abraham* , Sugata Sanyal and Sang Yong Han, The N/R One Time Password System, IEEE International Conference on Information Technology: Coding and Computing (ITCC'05), USA, IEEE Computer Society, ISBN 0-7695-2315-3, pp. 733-738, 2005.
284. Saulat Farooque, *Ajith Abraham* and Lakhmi Jain, Collaborative Agent Learning Using Hybrid Neurocomputing, International Conference on Applied Computing, Portugal, SBN: 972-99353-6-X, Nuno Guimares and Pedro Isaias (Eds.), pp. 377-384, 2005.
285. *Ajith Abraham* , Ravi Jain, Sugata Sanyal and Sang Yong Han, SCIDS: A Soft Computing Intrusion Detection System, 6th International Workshop on Distributed Computing (IWDC 2004), A. Sen et al. (Eds.) Springer Verlag, Germany, Lecture Notes in Computer Science, Vol. 3326, ISBN: 3-540-24076-4, pp. 252-257, 2004.
286. Sugata Sanyal, *Ajith Abraham* , Dhaval Gada, Rajat Gogri, Punit Rathod, Zalak Dedhia and Nirali Mody, Security Scheme for Malicious Node Detection in Mobile Ad Hoc Networks, 6th International Workshop on Distributed Computing (IWDC 2004), Springer Verlag, Germany, Lecture Notes in Computer Science, Vol. 3326, ISBN: 3-540-24076-4, pp. 541, 2004.
287. Saulat Farooque, *Ajith Abraham* and Lakhmi Jain, Collaborative Agent Learning Using Neurocomputing, 11th International Conference on Neural Information Processing, ICONIP'04, Pal N.R. et al. (Eds.) Springer Verlag, Germany, Lecture Notes in Computer Science, Vol. 3316, ISBN 3-540-23931-6, pp. 619-624, 2004.
288. Srilatha Chebrolu, *Ajith Abraham* and Johnson Thomas, Hybrid Feature Selection for Modeling Intrusion Detection Systems, 11th International Conference on Neural Information Processing, ICONIP'04, Pal N.R. et al. (Eds.) Springer Verlag, Germany, Lecture Notes in Computer Science, Vol. 3316, ISBN 3-540-23931-6, pp. 1020-1025, 2004.

289. Miao Chong, *Ajith Abraham*, Marcin Paprzycki, Traffic Accident Data Mining Using Machine Learning Paradigms, Fourth International Conference on Intelligent Systems Design and Applications (ISDA'04), Hungary, ISBN 9637154302, pp. 415-420, 2004.
290. Vitorino Ramos and *Ajith Abraham*, Evolving a Stigmergic Self-Organized Data Mining, Fourth International Conference on Intelligent Systems Design and Applications (ISDA'04), Hungary, ISBN 9637154302, pp. 725-730, 2004.
291. Andy Auyeung and *Ajith Abraham*, Largest Compatible Subset Problem for Phylogenetic Data, Genetic and Evolutionary Computation 2004 Conference (GECCO-2004), Bird-of-a-feather Workshop On Application of Hybrid Evolutionary Algorithms to Complex Optimization Problems, R. Poli et al. (Eds.), 2004.
292. Marcin Paprzycki, *Ajith Abraham*, Amalia Pirvanescu and Costin Badica, Agents Capable of Dynamic Negotiations, 6th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing, Romania, D.Petcu et al. (Eds.), Mirton Press, Timisoara, ISBN 973-661-441-7, pp. 369-380, 2004.
293. Marcin Paprzycki, *Ajith Abraham* and Ruiyuan Guo, Data Mining Approach for Analyzing Call Center Performance, The 17th International Conference on Industrial Engineering Applications of Artificial Intelligence and Expert Systems, Innovations in Applied Artificial Intelligence, Robert Orchard, Chunsheng Yang, Moonis Ali (Eds.), Lecture Notes in Computer Science 3029, Springer Verlag, Germany, pp. 1092-1101, 2004.
294. Srinivas Mukkamala, Andrew Sung and *Ajith Abraham*, Modeling Intrusion Detection Systems Using Linear Genetic Programming Approach, The 17th International Conference on Industrial Engineering Applications of Artificial Intelligence and Expert Systems, Innovations in Applied Artificial Intelligence, Robert Orchard, Chunsheng Yang, Moonis Ali (Eds.), Lecture Notes in Computer Science 3029, Springer Verlag, Germany, pp. 633-642, 2004.
295. Rangarajan Vasudevan, *Ajith Abraham*, Sugata Sanyal and Dharma P. Agrawal, Jigsaw-based Security in Data Transfer in Computer Networks, IEEE International Conference on Information Technology: Coding and Computing (ITCC'04), USA, IEEE Computer Society, Volume 1, pp. 2-6, 2004.
296. Sarbajit Pal, P.K. Biswas and *Ajith Abraham*, Face Recognition Using Interpolated Bezier Curve Based Representation, IEEE International Conference on Information Technology: Coding and Computing (ITCC'04), USA, IEEE Computer Society, Volume 1, pp. 45-49, 2004.
297. Khusbu Shah, Neha Dave, Sampada Chavan, Sanghamitra Mukherjee, *Ajith Abraham* and Sugata Sanyal, Adaptive Neuro-Fuzzy Intrusion Detection System, IEEE International Conference on Information Technology: Coding and Computing (ITCC'04), USA, IEEE Computer Society, Volume 1, pp. 70-74, 2004.
298. Austin Gilbert, *Ajith Abraham* and Marcin Paprzycki, A Framework for Ensuring Data Integrity in Grid Environments, IEEE International Conference on Information Technology: Coding and Computing (ITCC'04), USA, IEEE Computer Society, Volume 1, pp. 435-439, 2004.
299. Venkatraman S., *Ajith Abraham* and Marcin Paprzycki, Significance of Steganography on Data Security, IEEE International Conference on Information Technology: Coding and Computing (ITCC'04), USA, IEEE Computer Society, Volume 2, pp. 347-351, 2004.
300. Miao M. Chong, *Ajith Abraham*, Marcin Paprzycki, Traffic Accident Analysis Using Decision Trees and Neural Networks, International Conference on Applied Computing, Portugal, Nuno Guimaraes and Pedro Isaias (Eds.), ISBN: 9729894736, Volume 2, pp. 39-42, 2004.
301. Srinivas Mukkamala, Andrew Sung and *Ajith Abraham*, Distributed Multi-Intelligent Agent Framework for Detection of Stealthy Probes, Third International Conference on Hybrid Intelligent Systems, Australia, Design and Application of Hybrid Intelligent Systems, Abraham A., Koeppen M. and Franke K. (Eds.) IOS Press, Amsterdam, The Netherlands, pp. 116-125, 2003.
302. Cong Tran, *Ajith Abraham* and Lakhmi Jain, Decision Support Systems Using Hybrid Neuro-computing, Third International Conference on Hybrid Intelligent Systems, Australia, Design

- and Application of Hybrid Intelligent Systems, Abraham A., Koppen M. and Franke K. (Eds.), IOS Press, Amsterdam, The Netherlands, pp. 779-788, 2003.
303. Vitorino Ramos and *Ajith Abraham*, Swarms on Continuous Data, 2003 IEEE Congress on Evolutionary Computation (CEC2003), Australia, IEEE Press, ISBN 0780378040, pp. 1370-1375, 2003.
  304. *Ajith Abraham* and Vitorino Ramos, Web Usage Mining Using Artificial Ant Colony Clustering and Genetic Programming, 2003 IEEE Congress on Evolutionary Computation (CEC2003), Australia, IEEE Press, ISBN 0780378040, pp. 1384-1391, 2003.
  305. Andy AuYeung and *Ajith Abraham*, Estimating Genome Reversal Distance by Genetic Algorithm, 2003 IEEE Congress on Evolutionary Computation (CEC2003), Australia, IEEE Press, ISBN 0780378040, pp. 1157-1161, 2003.
  306. Imran Maqsood, Muhammad Riaz Khan and *Ajith Abraham*, Weather Forecasting Models Using Ensembles of Neural Networks, Third International Conference on Intelligent Systems Design and Applications, Intelligent Systems Design and Applications, Advances in Soft Computing, Springer Verlag, Germany, pp. 33-42, 2003.
  307. Srinivas Mukkamala, Andrew Sung and *Ajith Abraham*, Intrusion Detection Using Ensemble of Soft Computing Paradigms, Third International Conference on Intelligent Systems Design and Applications, Intelligent Systems Design and Applications, Advances in Soft Computing, Springer Verlag, Germany, pp. 239-248, 2003.
  308. *Ajith Abraham* and Andy AuYeung, Integrating Ensemble of Intelligent Systems for Modeling Stock Indices, 7th International Work Conference on Artificial and Natural Neural Networks, Lecture Notes in Computer Science Volume 2687, Jose Mira and Jose R. Alvarez (Eds.), Springer Verlag, Germany, pp. 774-781, 2003.
  309. Shawkat Ali and *Ajith Abraham*, Improved Kernel Learning Using Smoothing Parameter Based Linear Kernels, 7th International Work Conference on Artificial and Natural Neural Networks, Lecture Notes in Computer Science, Volume 2686, Jose Mira and Jose R. Alvarez (Eds.), Springer Verlag, Germany, pp. 206-213, 2003.
  310. Ravi Jain and *Ajith Abraham*, A Comparative Study of Fuzzy Classifiers on Breast Cancer Data, 7th International Work Conference on Artificial and Natural Neural Networks, Lecture Notes in Computer Science Volume 2687, Jose Mira and Jose R. Alvarez (Eds.), Springer Verlag, Germany, pp. 512-519, 2003.
  311. Ron Edwards, *Ajith Abraham* and Sonja Petrovic-Lazarevic, Export Behaviour Modeling Using EvoNF Approach, The International Conference on Computational Science (ICCS 2003), Springer Verlag, Lecture Notes in Computer Science Volume 2660, Sloot P.M.A. et al. (Eds.), pp. 169-178, 2003.
  312. *Ajith Abraham*, Johnson Thomas and George Ghinea, Mining Network Quality of Service for Human Computer Interaction using Neural Networks, 10th International Conference on Human - Computer Interaction, Vol. 3, pp. 1193-1197, Greece, 2003.
  313. *Ajith Abraham*, i-Miner: A Web Usage Mining Framework Using Hierarchical Intelligent Systems, The IEEE International Conference on Fuzzy Systems, FUZZ-IEEE'03, IEEE Press, ISBN 0780378113, pp. 1129-1134, 2003.
  314. Cong Tran, *Ajith Abraham* and Lakhmi Jain, A Concurrent Fuzzy-Neural Network Approach for Decision Support Systems, The IEEE International Conference on Fuzzy Systems, FUZZ-IEEE'03, IEEE Press, ISBN 0780378113, pp. 1092-1097, 2003.
  315. Cong Tran, Lakhmi Jain and *Ajith Abraham*, TACDSS: Adaptation Using a Hybrid Neuro-Fuzzy System, Advances in Soft Computing: Engineering Design and Manufacturing, Jose Benitez et al. (Eds.), Springer Verlag, Germany, pp. 53-62, 2003.
  316. Imran Maqsood, Muhammad Riaz Khan and *Ajith Abraham*, Canadian Weather Analysis Using Connectionist Learning Paradigms, Advances in Soft Computing: Engineering Design and Manufacturing, Benitez J. M. et al. (Eds.), Springer Verlag, Germany, pp. 21-32, 2003.

317. Xiaozhe Wang, *Ajith Abraham* and Kate A. Smith, Soft Computing Paradigms for Web Access Pattern Analysis, Proceedings of the International Conference on Fuzzy Systems and Knowledge Discovery, Lipo Wang, Saman Halgamuge and Xin Yao (Eds.), Volume 1, pp. 631-635, 2002.
318. Shawkat Ali and *Ajith Abraham* , An Empirical Comparison of Kernel Selection for Support Vector Machines, 2nd International Conference on Hybrid Intelligent Systems, Soft Computing Systems: Design, Management and Applications, Abraham A., Koeppen M. and Ruiz-del-Solar J. (Eds.), IOS Press, The Netherlands, pp. 321-330, 2002.
319. Xiaozhe Wang, *Ajith Abraham* and Kate A. Smith, Web Traffic Mining Using a Concurrent Neuro-Fuzzy Approach, 2nd International Conference on Hybrid Intelligent Systems, Chile, Soft Computing Systems: Design, Management and Applications, Abraham A., Koeppen M. and Ruiz-del-Solar J.(Eds.), IOS Press, The Netherlands, pp. 853-862, 2002.
320. Cong Tran, *Ajith Abraham* and Lakhmi Jain, Adaptation of Mamdani Fuzzy Inference System Using Neuro - Genetic Approach for Tactical Air Combat Decision Support System, 15th Australian Joint Conference on Artificial Intelligence (AI'02) Australia, LNAI 2557, Springer Verlag, Germany, pp. 672-679, 2002.
321. *Ajith Abraham* , EvoNF: A Framework for Optimization of Fuzzy Inference Systems Using Neural Network Learning and Evolutionary Computation, The 17th IEEE International Symposium on Intelligent Control, ISIC'02, IEEE Press, ISBN 0780376218, pp 327-332, 2002.
322. *Ajith Abraham* , Ninan Sajith Philip, Baikunth Nath, P. Saratchandran, Performance Analysis of Connectionist Paradigms for Modelling Chaotic Behavior of Stock Indices, Second International Workshop on Intelligent Systems Design and Applications, (ISDA'02), Computational Intelligence and Applications, Dynamic Publishers Inc., USA, ISBN 096403980X, pp. 181-186, 2002.
323. Muhammad Riaz Khan and *Ajith Abraham* , A Hybrid Fuzzy-Neural Network for Modeling Short-Term Demand Forecasting in Czech Republic, Computational Intelligence and Applications, Dynamic Publishers Inc., USA, ISBN 096403980X, pp. 187-194, 2002.
324. Imran Maqsood, Muhammad Riaz Khan and *Ajith Abraham* , Neurocomputing Based Canadian Weather Analysis, Computational Intelligence and Applications, Dynamic Publishers Inc., USA, ISBN 096403980X, pp. 39-44, 2002.
325. *Ajith Abraham* , Optimization of Evolutionary Neural Networks Using Hybrid Learning Algorithms, IEEE International Joint Conference on Neural Networks (IJCNN'02), 2002 IEEE World Congress on Computational Intelligence, Hawaii, ISBN 0780372786, IEEE Press, Volume 3, pp. 2797-2802, 2002.
326. *Ajith Abraham* , Analysis of Hybrid Soft and Hard Computing Techniques for Forex Monitoring Systems, IEEE International Conference on Fuzzy Systems (IEEE FUZZ'02), 2002 IEEE World Congress on Computational Intelligence, Hawaii, ISBN 0780372808, IEEE Press pp. 1616 - 1622, 2002.
327. Muhammad Riaz Khan, Cestmir Ondrusek and *Ajith Abraham* , Soft Computing Models for Short Term Load Forecasting in Czech Republic, Hybrid Information Systems, Advances in Soft Computing, Physica Verlag, Germany, ISBN 3790814806, pp. 207-222, 2002.
328. Sonja Petrovic-Lazerevic and *Ajith Abraham* , Optimizing Linear Programming Technique Using Fuzzy Logic, Hybrid Information Systems, Advances in Soft Computing, Physica Verlag, Germany, ISBN 3790814806, pp.269-284, 2002.
329. Gleb Beliakov and *Ajith Abraham* , Global Optimization of Neural Networks Using Deterministic Hybrid Approach, Hybrid Information Systems, Advances in Soft Computing, Physica Verlag, Germany, ISBN 3790814806, pp. 79-92, 2002.
330. Maumita Bhattacharya, *Ajith Abraham* and Baikunth Nath, A Linear Genetic Programming Approach for Modeling Electricity Demand Prediction in Victoria, Hybrid Information Systems, Advances in Soft Computing, Physica Verlag, Germany, ISBN 3790814806, pp. 379-394, 2002.

331. Cong Tran, Lakhmi Jain and *Ajith Abraham* , Adaptive Database Learning in Decision Support System Using Evolutionary Fuzzy Systems: A Generic Framework, Hybrid Information Systems, Advances in Soft Computing, Physica Verlag, Germany, ISBN 3790814806, pp. 237-252, 2002.
332. Golam Sorwar, *Ajith Abraham* and Laurence Dooley, Texture Classification Based on DCT and Soft Computing, The 10th IEEE International Conference on Fuzzy Systems, FUZZ IEEE'01, IEEE Press, Volume 2, pp. 545 -548, 2001.
333. *Ajith Abraham* and Morshed Chowdury, An Intelligent Forex Monitoring System, IEEE International Conference on Info-net and Info-tech, ICII 2001, ISBN: 0780370104, IEEE Press, Volume: 3, pp. 523 -528, 2001.
334. Sonja Petrovic-Lazerevic, Ken Coghil and *Ajith Abraham* , Neuro-Fuzzy Support of Knowledge Management in Social Regulation, CASYS 2001, Computing Anticipatory Systems, Dubois D.M.(Ed.), American Institute of Physics, New York, ISBN 0735400814, pp. 387- 400, 2002.
335. *Ajith Abraham* , Neuro-Fuzzy Systems: State-of-the-Art Modeling Techniques, Connectionist Models of Neurons, Learning Processes, and Artificial Intelligence, Lecture Notes in Computer Science. Volume. 2084, Springer Verlag Germany, Jose Mira and Alberto Prieto (Eds.), ISBN 3540422358, Spain, pp. 269-276, 2001.
336. *Ajith Abraham* and Dan Steinberg, Is Neural Network a Reliable Forecaster on Earth- A MARS Query!, Bio-Inspired Applications of Connectionism, Lecture Notes in Computer Science. Volume. 2085, Springer Verlag Germany, Jose Mira and Alberto Prieto (Eds.), ISBN 3540422374, Spain, pp.679-686, 2001.
337. *Ajith Abraham* , Beyond Neuro-Fuzzy Systems: Reviews, Prospects, Perspectives and Directions, 7th International Mendel Conference on Soft Computing (MENDEL 2001), Czech Republic, Published by Brno University of Technology, Matousek Radek and Osmera Pavel (Eds.), ISBN 802141894X, pp. 81-86, 2001.
338. *Ajith Abraham* , It is time to Fuzzify Neural Networks, Intelligent Multimedia, Computing and Communications: Technologies and Applications of the Future, Fargo, USA, John Wiley Sons Inc., Syed M.R. & Baiocchi O.R. (Editors), ISBN 0471202358, pp. 253-263, 2001.
339. *Ajith Abraham* , Ninan Sajith and Babu Joseph, Will We Have a Wet Summer? Long-term Rain Forecasting Using Soft Computing Models, Modelling and Simulation 2001, Publication of the Society for Computer Simulation International, Prague, Czech Republic, Kerckhoffs E.J.H. & Snorek M. (Eds.), ISBN 1565552253, pp. 1044-1048, 2001.
340. *Ajith Abraham* and Baikunth Nath, ALEC -An Adaptive Learning Framework for Optimizing Artificial Neural Networks, Lecture Notes in Computer Science 2074, Springer- Verlag Germany, Vassil N Alexandrov et al (Eds.), ISBN 3540422331, USA, pp. 171-180, 2001.
341. *Ajith Abraham* and Dan Steinberg, MARS: Still an Alien Planet in Soft Computing?, Lecture Notes in Computer Science 2074, Springer-Verlag Germany, Vassil N Alexandrov et al (Eds.), ISBN 3540422331, San Francisco, USA, pp. 235-244, 2001.
342. *Ajith Abraham* , Baikunth Nath and Mahanti P K, Hybrid Intelligent Systems for Stock Market Analysis, Lecture Notes in Computer Science 2074, Vassil N Alexandrov et al (Eds.), Springer-Verlag Germany, ISBN 3540422331, USA, pp. 337-345, 2001.
343. *Ajith Abraham* , Rajkumar Buyya and Baikunth Nath, Nature's Heuristics for Scheduling Jobs in Computational Grids, In Proceedings of 8th IEEE International Conference on Advanced Computing and Communications, (ADCOM2000), Sinha P.S. and Gupta R. (Editors), ISBN 0070435480, Tata McGraw-Hill Publishing Co. Ltd, New Delhi, India, pp. 45-52, 2000.
344. *Ajith Abraham* and Baikunth Nath, Designing Optimal Neuro-Fuzzy Systems for Intelligent Control, In Proceedings of The Sixth International Conference on Control, Automation, Robotics and Vision, (ICARCV 2000 - Singapore),(CD ROM Proceeding), Wang J.L. (Editor), ISBN 9810434456, Singapore, 2000.
345. *Ajith Abraham* and Baikunth Nath, Evolutionary Design of Fuzzy Control Systems - An Hybrid Approach, In Proceedings of The Sixth International Conference on Control, Automation,

- Robotics and Vision, (ICARCV 2000 - Singapore), (CD ROM Proceeding), Wang J.L. (Editor), ISBN 9810434456, Singapore, 2000.
346. *Ajith Abraham* , An Evolving Fuzzy Neural Network Model Based Reactive Power Control, In Proceedings of The Second International Conference on Computers In Industry, ICCI 2000, Published by The Bahrain Society of Engineers, Majeed A Karim et al (Eds.), Bahrain, pp. 247-253, 2000.
  347. *Ajith Abraham* , A Soft Computing Approach for Fault Prediction of Electronic Systems, In Proceedings of The Second International Conference on Computers In Industry, ICCI 2000, Published by The Bahrain Society of Engineers, Majeed A Karim et al (Eds.), Bahrain, pp. 83-91, 2000.
  348. *Ajith Abraham* and Baikunth Nath, Connectionist Models for Intelligent Reactive Power Control, In Proceedings of The Australasian MATLAB Users Conference 2000, Published by Ceanet Pty Ltd, Australia (Online Proceedings), 2000.
  349. *Ajith Abraham* and Baikunth Nath, Evolutionary Design of Neuro-Fuzzy Systems - A Generic Framework, In Proceedings of The 4-th Japan-Australia Joint Workshop on Intelligent and Evolutionary Systems (JA2000), Published by the National Defence Academy (Japan) and University of New South Wales (Australia), Akira Namatame et al. (Editors), ISBN 0731705041, Japan, pp. 106-113, 2000.
  350. *Ajith Abraham* and Baikunth Nath, Optimal Design of Neural Nets Using Hybrid Algorithms, In Proceedings of The Sixth Pacific Rim International Conference on Artificial Intelligence (PRICAI2000), Lecture Notes in Artificial Intelligence 1886, Mizoguchi R. Slaney J. (Eds.), Springer Verlag, Germany, ISBN 3540679251, Melbourne, pp. 510-520, 2000.
  351. *Ajith Abraham* and Baikunth Nath, Hybrid Heuristics for Optimal Design of Neural Nets, In Proceedings of Third International Conference in Recent Advances in Soft Computing, (RASC2000), Advances in Soft Computing - Soft Computing Techniques and Applications, John R. Birkenhead R. (Eds.), Springer Verlag- Germany, ISBN 3790813613, pp. 15-22, 2000.
  352. *Ajith Abraham* and Baikunth Nath, IT Impact On New Millennium Manufacturing, In Proceedings of 5th International Conference on Computer Integrated Manufacturing,(ICCIM-2000), Computer Integrated Manufacturing, Singh J., Lew S.C. and Gay R. (Eds.), ISBN 9810419236 ISBN 9810419961, Singapore, pp. 321-332, 2000.
  353. *Ajith Abraham* and Baikunth Nath, Failure Prediction Of Critical Electronic Systems in Power Plants Using Artificial Neural Networks, In Proceedings of First International Power Energy Conference, Australia (INTPEC'99), (CD ROM Proceeding), Isreb M (Editor), ISBN 0732620945, Australia, 1999.
  354. *Ajith Abraham* and Baikunth Nath, Artificial Neural Networks for Intelligent Real Time Power Quality Monitoring Systems, In Proceedings of First International Power & Energy Conference, Australia (INTPEC'99), (CD ROM Proceeding), Isreb M. (Editor), ISBN 0732620945, Australia, 1999.
  355. Baikunth Nath and *Ajith Abraham* , Parallel Machine Scheduling using Genetic Algorithms, In Proceedings of International AMSE conference on Computer Modeling, Simulation and Communication, CMSC-99, Mahanti P.K. Dhyani P. (Eds.), ISBN 0074637525, Tata McGraw-Hill Publishing Co. Ltd, India, pp. 124-128, 1999.

#### OTHER PUBLICATIONS

##### **Invited/Non refereed papers/Short articles etc.**

1. *Ajith Abraham* , Evolving Smart Information Systems: Challenges, Perspectives and Applications, Third International Conference on Trends in Information Sciences and Engineering (TISE 2011), Chennai, India, 2011 [Plenary Talk].
2. *Ajith Abraham*, ICT for Social Revolutions: Challenges, Perspectives and Applications, First Indo-Czech Synergy Programme on Advances in Information and Communication Technologies, Nagpur, India, August 2011 [Invited Talk].
3. *Ajith Abraham* , Counter Terrorism: Technologies, Challenges and Applications, National Workshop on Cyber Security, Kochi, India, August 2011 [Invited Talk].

4. *Ajith Abraham* , Publish or Perish: Surviving the Academic Challenge, One day Workshop on ICT Research, Delhi, India, August 2011 [Invited Talk].
5. *Ajith Abraham* , Publish or Perish: Surviving the Academic Challenge, One day Workshop on ICT Research, Gwalior, India, August 2011 [Invited Talk].
6. *Ajith Abraham* , Evolving Future Information Systems: Challenges, Perspectives and Applications, The 11th International Conference on Computational Science and Its Applications (ICCSA 2011), Santander, Spain, Springer Verlag, Germany, LNCS, 2011 [Plenary Talk].
7. *Ajith Abraham* , Quo-Vadis Hybrid Intelligent Systems: Architectures, Challenges and Applications, 7th International Conference on Hybrid Artificial Intelligent Systems (HAIS 2011), Springer Verlag, Germany, LNAI 6678, ISBN 978-3-642-21218, pp. 30, 2011 (Plenary Talk).
8. *Ajith Abraham* , Evolving Smart Information Systems: Role of Soft Computing, International Conference on Soft Computing Models in Industrial and Environmental Applications Salamanca, Spain, Springer Verlag, Germany, 2011 (Plenary Talk).
9. *Ajith Abraham* , Nature Inspired Meta-heuristics: Quo Vadis? Fourth International Conference on Genetic and Evolutionary Computing (ICGEC 2010), Shenzhen, China, IEEE, 2010 (Plenary Talk).
10. *Ajith Abraham* , Counter Terrorism: From Cyber to Real world - The Role of Machine Intelligence, 3rd International Conference on Computational Intelligence in Security for Information Systems (CISIS'10), Leon, Spain, Springer Verlag, Germany, 2010 (Plenary Talk).
11. *Ajith Abraham* , Evolving Information Systems, Third International Conference on Emerging Trends in Engineering and Technology (ICETET-10), Goa, India, ISBN 978-0-7695-3884-6, IEEE, 2010 (Plenary Talk).
12. *Ajith Abraham* , Evolving Smart Information Systems, International Workshop on Meta-Heuristics and IT Researchers, IITM Gwalior, India, 2010 (Plenary Talk).
13. *Ajith Abraham* , Adaptive Data Structures for Modeling Hybrid Soft Computing Architectures, Fourth International Conference on Neural Parallel and Scientific Computation (NPSC 2010), Atlanta, USA, ISBN 1-890888-05-02, 2010 (Plenary Talk)
14. *Ajith Abraham* , Combating Terrorism: Soft Computing Technologies and Challenges, International Workshop on Soft Computing Models in Industrial Applications (SOC0 2010), Portugal, 2010 (Plenary Talk).
15. *Ajith Abraham* , Towards the Evolution of Smart Information Systems, International Conference and Workshop on Software Engineering and Intelligent Systems (SEIS 2010), Ota, Nigeria, 2010 (Plenary Talk).
16. *Ajith Abraham* , Engineering Hybrid Intelligent Systems: Architectures, Challenges and Perspectives, International Seminar on Intelligent Systems and Soft Computing, University of Granada, Spain, 2010 (Invited Talk).
17. *Ajith Abraham* , Soft Computing and Terrorism Informatics: Technologies and Challenges, Soft Computing Techniques and Their Engineering Applications (SDP), Gwalior, India, 2010 (Invited Talk).
18. *Ajith Abraham* , Combating Terrorism: Intelligent Technologies and Challenges, National Conference on Advanced Computing, Kochi, India, 2010 (Keynote Talk).
19. *Ajith Abraham* , Combating Terrorism: Technologies and Challenges, Terrorism and War: The Changing Relationship between Terrorism, Insurgency and Inter-State War (CSPTV 2010), St Andrews, UK, 2010 (Invited Talk).
20. *Ajith Abraham* , Soft Intrusion Detection, Prevention and Risk Assesment, Third International Conference on Pattern Recognition and Machine Intelligence (PReMI 2009), New Delhi, India, 2009 (Invited Talk).
21. *Ajith Abraham* , Engineering Hybrid intelligent systems: From Architecture Design to Advanced Information Processing, IEEE International Conference on Information Science and Engineering (ICISE 2009), Nanjing, China, IEEE Computer Society Press, USA, 2009 (Keynote Talk).

22. *Ajith Abraham* , Intrusion Detection, Prevention and Real Time Risk Assesment, Eighth International Conference on Mathematical and Computational Models (ICMCM 2009), Coimbatore, India , 2009 (Keynote talk).
23. *Ajith Abraham* , Machine Intelligence to Network Intelligence, International Seminar on Machine Intelligence, Universitas Yarsi, Jakarta, Indonesia, 2009 (Invited Talk).
24. Shubhangi Giripunje, Preeti Bajaj and *Ajith Abraham* , Emotion Recognition System Using Connectionist Models, In Proceedings of Thirteenth International Conference on Cognitive and Neural Systems, ICCNS'09, Boston University Press, USA, 2009.
25. Sarina Sulaiman, Siti Mariyam Shamsuddin, *Ajith Abraham* and Shahida Sulaiman, A Framework of Rough-Cultural Algorithms in Optimizing Mobile Web Caching Performance, Journal of Information technology, ISSN 0128-3790, Universiti Teknologi Malaysia, pp. 118-133, 2008.
26. *Ajith Abraham* , Natural Computation for Business Intelligence from Web Usage Mining, 7th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC'05), Timisoara, Romania, IEEE CS Press, pp. 3-10, 2005.
27. Soumya Banerjee, Crina Grosan and *Ajith Abraham* , Modeling Crowd Behavior Using Emotional Ants, Journal of Studia Universitatis Babes-Bolyai, Informatica, Volume L, Number 1, pp. 37-48, 2005.
28. Crina Grosan, *Ajith Abraham* , Radu Campian, Stefan Tigan, Evolution Strategies for Ranking Several Trigeminal Neuralgia Treatments. Applied Medical Informatics, Volume 17, Issues 3-4, pp. 72-78, 2005.
29. Yuehui Chen, Ju Yang, Bo Yang and *Ajith Abraham* , Flexible Neural Trees Ensemble for Stock Index Modeling, 2005 IEEE International Conference on Intelligent Computing (ICIC05), CD ROM Proceedings, De-Shuang Huang, Jiming Liu and Seong-Whan Lee (Eds.), Hefei, China, 2005.
30. Crina Grosan and *Ajith Abraham* , Solving No Free lunch Issues from a Practical Perspective, In Proceedings of Ninth International Conference on Cognitive and Neural Systems, ICCNS'05, Boston University Press, USA, 2005.
31. Maria Ganzha, Marcin Paprzycki, Amalia Pirvanescu, Costin Badica and *Ajith Abraham* , Jade Based Multi-Agent E-commerce Environment, Analele Universitatii de Vest Timisoara - Seria Matematica/Informatica, Romania, Vol. XLII, pp. 79-100, 2004.
32. Marcin Paprzycki and *Ajith Abraham* , Agent Systems Today: Methodological Considerations, The International Conference on Management of e-Commerce and e-Government, Jangxi Science and Technology Press, China, ISBN 7539023694, pp. 416-421, 2003.
33. Garima Parakh, Sandhya Rani, Marcin Paprzycki, *Ajith Abraham* and Johnson Thomas, Agents Capable of Dynamic Negotiations, 3rd International Interdisciplinary Conference on Electronic Commerce, ECOM-03, Electronic Commerce: Research and Development, Paprzycki M. (Editor) ACTEN Press, Poland, pp.113-120, 2003.
34. Sonja Petrovic-Lazerevic, *Ajith Abraham* and Ken Coghill, Optimising Social Regulation Policies, In Proceedings of the Jugoslovenski simpozijum operacionim istrazivanjima , SYM-OP-IS 2002, Yugoslavia, ISBN 8684231007, Volume III, pp. 25 - 28, 2002.
35. *Ajith Abraham* , How Important is Meta-Learning in Evolutionary Fuzzy Systems?, In Proceedings of Sixth International Conference on Cognitive and Neural Systems, ICCNS'02, Boston University Press, USA, 2002.
36. *Ajith Abraham* and Baikunth Nath, Is Evolutionary Design the Solution for Optimizing Neural Networks?, In Proceedings of Fifth International Conference on Cognitive and Neural Systems, ICCNS 2001, Boston University Press, USA, 2001.

## BOOK REVIEWS

### Review of Books Published by ACM Computing Reviews

Available online from: <http://www.reviews.com>

1. *Ajith Abraham* , (Book Review), Learning from data: Concepts, Theory, and Methods, by Cherkassky V., Mulier F., Wiley-IEEE Press, 2007 [Published on May 25, 2008].
2. *Ajith Abraham* , (Book Review), Handbook of innovative computing: models, enabling technologies, and applications, by Albert Zomaya (Ed.), Springer-Verlag New York, Inc., Secaucus, NJ, 736 pages, 2005 [Published on October 05, 2006].
3. *Ajith Abraham* , (Book Review) 'Handbook of Learning and Approximate Dynamic Programming' by Si J., Barto A., Powell W., Wunsch D., IEEE press series on computational intelligence, Wiley-IEEE Press, 2005 (Published on March 18, 2005).
4. *Ajith Abraham* , (Book Review), 'Metacreation: Art and Artificial Life' by Whitelaw M., MIT Press, Cambridge, MA, 281 pages, 2004 (Published on July 02, 2004).
5. *Ajith Abraham* , (Book Review), 'Evolutionary Algorithms and Agricultural Systems' by Mayer D., Kluwer Academic Publishers, Norwell, MA, 2001. 107 pages (Published on August 28, 2002).

## ACADEMIC SERVICES

### International Conference Organization

1. General Chair, Innovations in Bio-inspired Computing and Applications (IBICA 2011), Shenzhen, China
2. General Chair, World Congress on Information and Communication Technologies (WICT 2011), Mumbai, India
3. General Chair, First International Conference on Advances in Computing and communications (ACC 2011), Kochi, India
4. General Co-Chair, Fourth International Conference on Multimedia Information Networking and Security (MINES 2012), Nanjing, China, 2011.
5. General Co-Chair, Third International Conference on Computational Intelligence, Communication Systems and Networks (CICSyN 2011), Bali, Indonesia
6. General Co-Chair, Third International Conference on Computational Intelligence, Modelling Simulation (CIMSIm 2011), Langkawi, Malaysia
7. General Co-Chair, Fifth Asia Modelling Symposium (AMS 2011), Manila, Philippines
8. General Co-Chair, UKSim 13th International Conference on Computer Modelling and Simulation (UKSim 2011), Cambridge, United Kingdom
9. General Co-Chair, Second International Conference on Intelligent Systems, Modelling and Simulation (ISMS 2011), Phnom Penh, Cambodia
10. Program Chair, Proceedings of the Fifth European Conference on Data Mining (ECDM 2011), Rome, Italy
11. General Chair, International Conference on Communication Systems and Network Technologies (CSNT 2011), India
12. Program Chair, International Symposium on Distributed Computing and Artificial Intelligence (DCAI 2011), Salamanca, Spain, 6-8th April, 2011.
13. Publication Chair, 12th International Carpathian Control Conference (ICCC 2011), Czech Republic, 25-27, May 2011.
14. General Chair, Third International Conference of Soft Computing and Pattern Recognition (SoCPaR 2011), Dalian, China, October 14-16, 2011.
15. General Chair, Third International Conference on Computational Aspects of Social Networks (CASON'11), Salamanca, Spain, October 19-21, 2011.

16. General Chair, Seventh International Conference on Next Generation Web Services Practices (NWESP'11), Salamanca, Spain, October 19-21, 2011.
17. General Chair, Eleventh International Conference on Intelligent Systems Design and Applications (ISDA 11), Cordoba, Spain, 22-24, November 2011.
18. General Chair, Third World Congress on Nature and Biologically Inspired Computing (NaBIC 11), Cairo, Egypt, November 24-26, 2011.
19. General Chair, Third International Conference on Intelligent Networking and Collaborative Systems (INCOS 11), Fukuoka, Japan, November 30 - December 2, 2011.
20. General Co-Chair, Third International Conference on Multimedia Information Networking and Security (MINES 2011), Shanghai, China, November 46, 2011.
21. General Chair, Seventh International Conference on information Assurance and Security (IAS'11), Melaka, Malaysia, December 05-08, 2011.
22. General Chair, Eleventh International Conference on Hybrid Intelligent Systems (HIS'11), Melaka, Malaysia, December 05-08, 2011.
23. General Co-Chair, International Conference on Multimedia Information Networking and Security (MINES 2010), Nanjing, China, November 46, 2010.
24. General Co-Chair, 3rd International Conference on Emerging Trends in Engineering and Technology (ICETET 2010), Goa, India, November 19-21, 2010.
25. General Co-Chair, World Congress on Nature and Biologically Inspired Computing (NaBIC 2010), Kitakyushu, Japan, December 15-17, 2010.
26. General Chair, International conference on Soft Computing and Pattern Recognition (SoCPaR 2010), Paris, France, December 07-10, 2010.
27. General Co-Chair, Tenth International Conference on Intelligent Systems Design and Applications (ISDA 2010), Cairo, Egypt, November 30-December 02, 2010.
28. General Co-Chair, 9th Computer Information Systems and Industrial Management Applications (CISIM'10), Cracow, Poland, October 08-10, 2010.
29. General Co-Chair, International Conference on Computational Aspects of Social Networks (CASoN 2010), Taiyuan, China, September 26-28, 2010.
30. General Chair, Sixth International Conference on Information Assurance and Security (IAS 2010), Atlanta, USA, August 23-25, 2010.
31. General Chair, Tenth International Conference on Hybrid Intelligent Systems (HIS 2010), Atlanta, USA, August 23-25, 2010.
32. Program Chair, Fourth European Conference on Data Mining (ECDM'10), Freiburg, Germany, July 28-30, 2010.
33. General Co-Chair, Fourth Asia International Conference on Modeling Simulation, (AMS 2010), Kota Kinabalu, Malaysia, 26-28 May, 2010.
34. General Co-Chair, 12th International Conference on Computer Modeling and Simulation (UK-SIM 2010), Cambridge, UK, March 24-26, 2010.
35. General Co-Chair, Second International Conference on Computational Intelligence, Modelling and Simulation (CIMSIm 2010), Bali, Indonesia, 2010.
36. General Co-Chair, Second International Conference on Computational Intelligence, Communication Systems and Networks, CICSyN 2010, Liverpool, UK, 2010.
37. General Co-Chair, International Conference on Intelligent Systems, Modelling and Simulation (ISMS 2010), Liverpool, UK, 2010.
38. General Co-Chair, The International Workshop on Cyber Physical and Social Computing (CPSC2009), Brisbane, Australia, 7 -10 July, 2009
39. General Co-Chair, The 8th International Conference on Pervasive Intelligence and Computing (PICom 2009) Chengdu, China December 12-14, 2009

40. General Co-Chair, World Congress on Nature and Biologically Inspired Computing (NaBIC 2009), New Delhi, India, December 09-11, 2009.
41. General Co-Chair, International Conference on Soft Computing and Pattern Recognition (SoC-PaR 2009), Malaysia, December 04-07, 2009.
42. General Co-Chair, Ninth International Conference on Intelligent Systems Design and Applications (ISDA 2009), Pisa, Italy, November 30-December 02, 2009.
43. General Co-Chair, International Conference on Intelligent Networking and Collaborative Systems (INCoS 2009), Barcelona, Spain, November 4-6, 2009.
44. General Co-Chair, Fifth International Conference on Information Assurance and Security (IAS 2009), Xi'an, China, August 18-20, 2009.
45. General Co-Chair, Ninth International Conference on Hybrid Intelligent Systems (HIS 2009), Shenyang, China, August 12 -14, 2009.
46. General Co-Chair, International Conference on Computational Aspects of Social Networks (CASoN 2009), Fontainebleau, France, June 24-27, 2009.
47. Program Chair, Third European Conference on Data Mining (ECDM'09), Algarve, Portugal, June 18-20, 2009.
48. General Co-Chair, Third Asia International Conference on Modelling Simulation, (AMS 2009). Bandung 25-26 May, Bali 29 May 2009.
49. General Co-Chair, 11th International Conference on Computer Modelling and Simulation (UK-SIM 2009), Cambridge, UK, March 25-27, 2009.
50. Tutorial Chair / Program Vice Chair, 2008 IEEE/WIC/ACM International Joint Conference on Web Intelligence and Intelligent Agent Technology (WI-IAT'08), Sydney, Australia, December 9-12, 2008.
51. General Co-Chair, Eighth International Conference on Intelligent Systems Design and Applications, ISDA'08, Taiwan, November 2008.
52. Program Chair, Third IEEE International Conference on Digital Information Management, ICDIM 2008, London, UK, November 2008.
53. General Co-Chair, International Conference on Soft Computing as Transdisciplinary Science and Technology, CSTST 2008, France, October 2008.
54. Program Co-Chair, Third International Conference on Hybrid Artificial Intelligent Systems, (HAIS 2008), Burgos, Spain, September 24-26, 2008.
55. General Co-Chair, Eighth International Conference on Hybrid Intelligent Systems, HIS 2008, Barcelona, Spain, September 2008.
56. General Co-Chair, Fourth International Symposium on Information Assurance and Security, IAS 2008, Naples, Italy, September 2008.
57. General Co-Chair, 2nd European Symposium on Computer Modeling and Simulation, EMS 2008, Liverpool, UK, September 8-10, 2008.
58. Program Chair, IEEE International Conference on the Application of Digital Information and Web Technologies, ICADIWT 2008, August 04-06, 2008.
59. Conference Chair, 7th Computer Information Systems and Industrial Management Applications (CISIM'08), Ostrava, Czech Republic , June 27-28, 2008.
60. Program Chair, Second European Conference on Data Mining, ECDM 2008, Amsterdam, Netherlands, 24 - 26 July 2008.
61. General Co-Chair, Second Asia International Conference on Modelling and Simulation, Kuala Lumpur, Malaysia, 13 - 15 May 2008.
62. General Co-chair, Tenth International Conference on Computer Modeling and Simulation, (UKSIM'08), Cambridge, UK, 1 - 3 April 2008.
63. Program Committee Vice Chair, 2007 IEEE/WIC/ACM International Conference on Web Intelligence (WI'07), Silicon Valley, USA, November 2-5, 2007.

64. Program Co-Chair, Second IEEE International Conference on Digital Information Management, ICDIM 2007, Lyon, France, October 29-31, 2007.
65. General Co-Chair, Seventh International Conference on Intelligent Systems Design and Applications, ISDA'07, Rio de Janeiro, Brazil, October 22-24, 2007.
66. Program Co-Chair, Seventh International Conference on Hybrid Intelligent Systems, HIS'07, Kaiserslautern, Germany, September 17-19, 2007.
67. General Co-Chair, The Third International Symposium on Information Assurance and Security, Manchester, United Kingdom, August 29-31, 2007.
68. Program Chair, First European Conference on Data Mining, Lisbon, Portugal, 6-8 July, 2007
69. Conference Co-Chair, 6th International Conference on Computer Information Systems and Industrial Management Applications - CISIM 2007, Elk, Poland, June 28 30, 2007.
70. General Co-Chair, First Asia International Conference on Modeling and Simulation, Phuket, Thailand, March 27-30, 2007.
71. Program Co-Chair, Sixth International Conference on Hybrid Intelligent Systems, HIS'06, Auckland, New Zealand, December 13-15, 2006.
72. General Co-Chair, Sixth International Conference on Intelligent Systems Design and Applications, ISDA'06, Jinan, China, October 16-18, 2006.
73. Program Co-Chair, International Conference on New Generation Web Services Practices (NWeSP'06), Seoul, Korea, September 25-28, 2006.
74. General Co-Chair, Fifth International Conference on Hybrid Intelligent Systems, HIS'05, Rio de Janeiro - Brazil, November 06-09, 2005.
75. Vice Co-Chair, 5th International Conference on Intelligent Systems Design and Applications, ISDA'05, Wroclaw, Poland, September 08-10, 2005.
76. Program Co-Chair, International Work Conference on New Generation Web Services Practices (NWeSP'05), Seoul, Korea, August 21-25, 2005.
77. General Co-Chair, The Fourth International Workshop on Soft Computing as Transdisciplinary Science and Technology, (WSTST 2005), Muroran, Japan, May 25-27, 2005.
78. Program Co-Chair, First World Congress in Lateral Computing (WCLC'04), Bangalore, India, 17-19 December 2004.
79. General Co-Chair, Fourth International Conference on Hybrid Intelligent Systems, HIS'04, Kitakyushu, Japan, 05-08 December 2004.
80. General Chair, 9th Online World Conference on Soft Computing in Industrial Applications WSC'8, September 20th-October 08th, 2004.
81. Program Co-Chair, Fourth International Conference on Intelligent Systems Design and Applications (ISDA'04), Budapest, Hungary, 26-28 August 2004.
82. General Co-Chair, Third International Conference on Hybrid Intelligent Systems, HIS'03, Melbourne, Australia, 14-17 December 2003.
83. General Chair, Third International Conference on Intelligent Systems Design and Applications (ISDA'03), Tulsa, Oklahoma, 10-13 August 2003.
84. General Co-Chair, Second International Conference on Hybrid Intelligent Systems, HIS'02, Santiago, Chile, 01-04 December 2002.
85. Organizing Co-Chair, First International Workshop on Intelligent Knowledge Management Techniques (IKOMAT'02), Italy, 16-18 September 2002.
86. Organizing Chair, Second International Workshop on Intelligent Systems Design and Applications (ISDA 2002), Atlanta, USA (07-08) August 2002.
87. General Co-Chair, First International Workshop on Hybrid Intelligent Systems, HIS 2001, Adelaide, Australia, (10-11) December 2001.
88. General Co-Chair, First International Workshop on Intelligent Systems Design and Applications, ISDA 2001, San Francisco, USA, May 2001.

## International Conference Program Committee Participation

1. International Conference on Man-Machine Interactions, The Beskids - Kocierz Pass, Poland , September 25-27, 2009.
2. IEEE International Conference on Information Reuser and Integration, IRI09, Las Vegas, August 10-12, 2009.
3. International Joint Conferences on Bioinformatics, Systems biology and computational intelligent, Shanghai, China, August 3-6, 2009.
4. International Conference on Advances in Social Networks Analysis and Mining 2009 (ASONAM09), Athens, Greece, July 20-22, 2009.
5. International Work-conference on the Interplay between Natural and Artificial Computation, Santiago, Spain, June 26-28, 2009.
6. IEEE International Conference on Intelligence and Security Informatics, Texas, USA, Jun 8-12, 2009.
7. Workshop on Self-Organization in Multi-Agent Systems, SOMAS 2009, Uppsala, Sweden, June 3-5, 2009.
8. 3rd International KES Symposium on Agents and Multi-agent Systems Technologies and Applications, KES AMSTA 2009, Uppsala, Sweden, June 3-5, 2009.
9. IEEE Congress on Evolutionary Computation, CEC 2009, Trondheim, Norway, 18-21 May 2009.
10. The 13th Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD-09), Thailand, 27-30 April, 2009.
11. First International Symposium on Intelligent Decision Technologies, IDT'09, Himeji, Japan, 23-25 April 2009
12. International Conference on Intensive Applications and Services, INTENSIVE 2009, Valencia, Spain, April 21-25, 2009.
13. 5th International Conference on Web Information Systems and Technologies, Lisbon, Portugal, March 23-26, 2009.
14. First International Conference on Human Computer Interaction, HCI2009, Allahabad, India, 20-23 January 2009.
15. International Workshop on Data Mining and Artificial Intelligence (DMAI 2008) in conjunction with 11th International Conference on Computer and Information Technology (ICCI 2008), Khulna, Bangladesh, December 25-27, 2008.
16. 2008 IEEE/WIC/ACM International Joint Conference on Web Intelligence and Intelligent Agent Technology (WI'08), Sydney, Australia, December 9-12, 2008.
17. International Conference on Intelligent Data Engineering and Automated Learning (IDEAL'08), Daejeon, South Korea, November 2-5, 2008.
18. International Conference on Knowledge Management, Columbus, Ohio, 23-24 October, 2008.
19. 2008 IEEE International Conference on e-Business Engineering, ICEBE 2008, Xi'an, China, October 22-24, 2008.
20. 3rd International Symposium Advances in Artificial Intelligence and Applications (AAIA'08), Wisla, Poland, October 20-22, 2008.
21. World Automation Congress, WAC 2008, Hawaii, USA, September 28 - October 2, 2008.
22. 3rd International Conference on Hybrid Artificial Intelligence Systems (HAIS 2007), Burgos, Spain, September 24-26, 2008.
23. 34th Euromicro Conference on Software Engineering and Advanced Applications, SEAA 2008, Parma, Italy, September 1-5, 2008.
24. 2008 IEEE International Conference on Granular Computing, Hangzhou , China, Aug 26-28, 2008.

25. The Ninth International Conference on Software Engineering, Artificial Intelligence, Networking, and Parallel/Distributed Computing, SNPD2008, Thailand, August 6 - 8, 2008.
26. International Workshop on Combinations of Intelligent Methods and Applications, CIMA 2008, in conjunction with 18th European Conference on Artificial Intelligence (ECAI-08), Patras, Greece, July 21-22, 2008.
27. IEEE 11th International Conference on Computational Science and Engineering, Sao Paulo - Brazil, July 16-18, 2008.
28. 2008 International Conference on Data Mining (DMIN'07), Las Vegas, USA, July 14-17, 2007.
29. The 2008 IEEE International Conference on Information Reuse and Integration (IEEE IRI-08), Las Vegas, USA, July 13 - 15, 2008
30. 2008 IEEE Conference on Soft Computing and Industrial Applications, June 25-27, 2008.
31. 2008 IEEE World Congress on Computational Intelligence (WCCI 2008), Hong Kong, June 1-6, 2008.
32. International Symposium on Agent and Multi-Agent Systems Technologies and Applications, Wroclaw, Poland, 31 May -1 June 2008.
33. 11th International Conference on Business Information Systems, BIS 2008, Innsbruck, Austria, 5-7 May 2008.
34. 4th International Conference on Web Information Systems and Technologies, WEBIST 2008, Madeira, Portugal, 4 - 7, May 2008.
35. Workshop on Self-Organization in Multi-Agent Systems, SOMAS 2008, in conjunction with 2nd International Symposium on Agents and Multi-Agent Systems - Technologies and Applications, Seoul, Korea, 26 - 28 March 2008.
36. Second International Conference on Complex, Intelligent and Software Intensive Systems (CISIS-2008), Polytechnic University of Catalonia, Barcelona, Spain, March 4-7, 2008.
37. 2nd International Conference on Software, Knowledge, Information Management and Applications (SKIMA), Kathmandu, Nepal, 18-21 March 2008.
38. IEEE/ACM International Conference on Signal-Image technology and Internet Based Systems, SITIS 2007, China, December 16-19, 2007.
39. 8th International Conference on Intelligent Data Engineering and Automated Learning (IDEAL'07), Birmingham, UK, 16-19 December, 2007.
40. 2007 International Symposium on Computational Models for Life Sciences CMLS07, Gold Coast, Queensland, Australia, December 17-19, 2007.
41. International Conference on Enterprise Systems and Applications Activity Center, Academia Sinica, Taipei, Taiwan, December 12-13, 2007.
42. 2007 IEEE Asia-Pacific Services Computing Conference (IEEE APSCC 2007) Tsukuba, Japan, December 11-14, 2007.
43. The Third International Conference on Intelligent Sensors, Sensor Networks and Information Processing (ISSNIP), Melbourne, Australia, December 3-6, 2007
44. 6th Mexican International Conference on Artificial Intelligence, Aguascalientes, Mexico, November 4-10, 2007.
45. Steering Committee Member, Third IEEE International Conference on Intelligent Information Hiding and Multimedia Signal Processing, IIHMSP'07, Kaohsiung, Taiwan, November 26-28, 2007.
46. 2007 International Conference on Convergence Information Technology (ICCIT07), Gyeongju, Korea, November 21 - 23, 2007.
47. 12th Conference of the Spanish Association of Artificial Intelligence Workshop on Technology Transfer on Artificial Intelligence, Salamanca, Spain, November 12-16, 2007.
48. The 6th Congress of Logic Applied to Technology (LAPTEC07), Santos, Brazil, November 7-9, 2007.

49. IEEE/WIC/ACM Workshop on Agents and Data Mining Interaction 2007, (ADMI2007), Silicon Valley, USA, November 2-5, 2007.
50. 2007 IEEE International Conference on Granular Computing Silicon Valley, USA, November 2-4, 2007.
51. 2007 IEEE/WIC/ACM International Conference on Web Intelligence (WI'07), Silicon Valley, USA, November 2-5, 2007.
52. IEEE International Conference on e-Business Engineering (ICEBE'07), Hong Kong October 24-26, 2007.
53. IEEE 7th International Symposium on Bioinformatics and Bioengineering (BIBE 2007), Cambridge - Boston, Massachusetts, USA, October 15-17, 2007.
54. Symposium on Advances in Artificial Intelligence and Applications (AAIA07), Wisla, Poland, October 15-17, 2007.
55. 12th Online World Conference on Soft Computing in Industrial Applications (WSC12), on the WWW, September 2007.
56. 2007 IEEE Congress on Evolutionary Computation (CEC), Singapore, September 25-28, 2007.
57. Analysis of Genetic Representations and Operators (AGRO 2007), Special session of the 2007 IEEE Congress on Evolutionary Computation, (CEC), Singapore, September 25-28, 2007.
58. The IEEE Region 8 International Conference on Computer as a tool, (EUROCON 2007), Warsaw, Poland, September 9-12, 2007.
59. 2007 IFIP International Conference on Network and Parallel Computing (NPC 2007), Dalian, China, September 18-21, 2007.
60. 13th International Conference on Soft Computing, Prague, Czech Republic, 5 - 7 September 2007.
61. 33rd EUROMICRO Conference on Software Engineering and Advanced Applications (SEAA), Lubeck, Germany, August 27 - 31, 2007.
62. 4th International Conference on Knowledge Management (ICKM 2007), Vienna, Austria, August 27-28, 2007.
63. IEEE International Joint Conference on Neural Networks (IJCNN'07), Orlando, Florida, USA, August 12-17, 2007.
64. The 2007 IEEE International Conference on Information Reuse and Integration, (IEEE IRI'07), Las Vegas, USA, August 13 - 15, 2007.
65. 2007 IEEE Three-Rivers Workshop on Soft computing in Industrial Applications, Passau, Germany, August 1-3, 2007.
66. The International Joint Conference on e-Business and Telecommunications, Barcelona, Spain, July 28-31, 2007.
67. IEEE Joint Conference on E-Commerce Technology (CEC'07) and Enterprise Computing, E-Commerce and E-Services (EEE'07), Tokyo, Japan, July 23-26, 2007.
68. 6th International Conference on Computer Information Systems and Industrial Management Applications, Elk, Poland, June 28 30, 2007.
69. 2007 International Conference on Data Mining (DMIN'07), Las Vegas, USA, June 25-28, 2007.
70. Fourth International Symposium on Neural Networks, (ISNN'07), Nanjing, China, June 3-7, 2007.
71. International Work-conference on the Interplay between Natural and Artificial Computation, IWINAC'07, Murcia, Spain, June 18-21, 2007.
72. The 8th Conference on Computing (CORE 2007), Mexico City, May 16-18, 2007.
73. 10th International Conference on Business Information Systems, (BIS'07), Poznan, Poland, April 25-27, 2007.
74. First International Workshop on P2P, Parallel, Grid and Internet Computing (3PGIC-2007), Vienna, Austria, April 10-13, 2007.

75. First International Conference on Complex, Intelligent and Software Intensive Systems, Vienna, Austria, April 10-13, 2007.
76. Second Information and Communication Technologies International Symposium (ICTIS'2006), Tetuan, Morocco, April 3-5, 2007.
77. IEEE Symposium on Computational Intelligence for Security and Defense Applications (CISDA'07), Hawaii, April 1-5, 2007.
78. 1st International Conference on Digital Communications and Computer Applications, Jordan, March 19-22, 2007.
79. Steering Committee Member, Second International Conference on Intelligent Information Hiding and Multimedia Signal Processing, IHHMSP'06, California, December 18-22, 2006.
80. 2006 IEEE/WIC/ACM International Conference on Web Intelligence (WI-06), Hong Kong, December 18-22, 2006.
81. International Symposium on Fuzzy and Rough Sets (ISFUROS 2006), Santa Clara, Cuba, December 5-8, 2006.
82. First IEEE International Conference on Digital Information Management (ICDIM'06), Bangalore, India, December 6-8, 2006.
83. 15th International Conference on Computing, CIC-2006, Mexico, November 21 - 24, 2006.
84. 5th Mexican International Conference on Artificial Intelligence (MICAI'06), Mexico, November 13-17, 2006.
85. 2006 International Conference on Hybrid Information Technology (ICHIT 2006), Cheju Island, Korea, November 9 - 11, 2006.
86. International Symposium on Artificial Intelligence and Applications (AIA06), Wisla, Poland, November 6-10, 2006.
87. IEEE International Conference on e-Business Engineering (ICEBE), Shanghai, China, Oct 24-26, 2006.
88. European Simulation and Modeling Conference (ESM 2006), Toulouse, France, October 23-25, 2006.
89. 5th International Conference on Computer Information Systems and Industrial Management Applications, Elk, Poland, October 18-20, 2006.
90. 11th Online World Conference on Soft Computing in Industrial Applications (WSC'11), World Wide Web, September 18 - October 06, 2006.
91. 7th International Conference on Intelligent Data Engineering and Automated Learning (IDEAL'06), Burgos, Spain, September 20-23, 2006.
92. First International Conference on Bio-Inspired Computing: Theory and Applications (BIC-TA), Wuhan, China, September 18-22, 2006.
93. 2006 International Conference on Innovative Computing, Information and Control, Beijing Jiaotong University, Beijing, P. R. China, August 30 - September 1, 2006.
94. International Conference on e-Business (IC-B'06), Setubal, Portugal, August 7-10, 2006.
95. 2006 IEEE Congress on Evolutionary Computation (CEC'06), 2006 World Congress in Computational Intelligence, Vancouver, Canada, July 16-21, 2006.
96. 6th International Conference on Recent Advances in Soft Computing (RASC 2006), Canterbury, UK, 10-12, July 2006.
97. 8th IEEE Conference on E-Commerce Technology (CEC'06) and the 3rd IEEE Conference on Enterprise Computing, E-Commerce and E-Services (EEE'06), San Francisco, CA, June 26-29, 2006.
98. The 2006 International Conference on Data Mining, Part of the 2006 World Congress in Computer Sciences, Las Vegas, USA, June 26-29, 2006.
99. 9th International Conference on Business Information Systems, BIS'06, Klagenfurt, Austria, May 31-June 2, 2006.

100. The 12th International Conference on Soft Computing, MENDEL 2006, Brno, Czech Republic, May 31- June2, 2006.
101. The Third IEEE International Symposium on Neural Networks (ISNN 2006), Chengdu, China, May 29-31, 2006.
102. 17th Information Resources Management Association (IRMA) Conference, Washington DC, USA, May 21-24, 2006.
103. 2006 IEEE International Conference on Granular Computing, Atlanta, USA, May 10-12, 2006.
104. Evolutionary Optimization Workshop - EvoOpt 2006, The 19th International FLAIRS Conference, Melbourne Beach, Florida, May 11-13, 2006.
105. The 4th International Multi-Conference on Computer Science and Information Technology, CSIT'06, Amman, Jordan, April 5-7, 2006.
106. Workshop on Learning Algorithms for Pattern Recognition, in conjunction with The 18th Australian Joint Conference on Artificial Intelligence, Sydney, Australia, 5-9 December 2005.
107. 2005 IEEE-ICDM Workshop on MultiAgent Data Warehousing and MultiAgent Data Mining, New Orleans, Louisiana, USA, November 27, 2005.
108. The International Conference on Knowledge Management (ICKM'05), North Carolina, USA, 27-28 October, 2005.
109. The IEEE International Conference on e-Business Engineering (ICEBE'05), Beijing, China, October 18-20, 2005.
110. 2005 European Simulation and Modeling Conference (ESM 2005), Porto, Portugal, 24-26 October, 2005.
111. The 2005 IEEE/WIC/ACM International Conference on Intelligent Agent Technology (IAT'05), France, September 19-22, 2005.
112. 10th Online World Conference on Soft Computing in Industrial Applications (WSC'10), September 19th - October 7th, 2005.
113. Poster track Program Committee, International Joint Conference on Artificial Intelligence (IJCAI-05), Edinburgh, Scotland, July 30 - August 5, 2005.
114. 2005 IEEE Midnight-Sun Workshop on Soft Computing Methods in Industrial Applications, Finland, June 28-30, 2005.
115. 2005 IEEE Congress on Evolutionary Computation, Edinburgh, UK, September 2-5, 2005.
116. Agent-Based Computing II- ABC 2005, Mexico, Morocco, Australia, 2005.
117. 10th International Conference on Fuzzy Theory and Technology, Salt Lake City, Utah, USA, July 21-26, 2005.
118. Information and Communication Technologies International Symposium (ICTIS'2005), Tetuan, Morocco, June 03-06, 2005.
119. Workshop on Information Security Assurance and Security (WISA'05), Tetuan, Morocco, June 03-06, 2005.
120. 18th International FLAIRS Conference, Special Track on Integrated Intelligent Systems, Florida, USA, May 16-18, 2005.
121. The 2nd International Conference on Information Technology: Human Computer Interaction, ICIT 2005, Amman, Jordan, May 3-5, 2005.
122. Fifth Congress of Logic Applied to Technology (LAPTEC'05), Hyogo, Japan, April 2-4, 2005.
123. International Work-conference on the Interplay between Natural and Artificial Computation (IWINAC-2005), Las Palmas, Canary Islands (Spain), June 1-4, 2005.
124. 11th International Mendel Conference on Soft Computing (MENDEL'05), Brno, Czech Republic, June 2005.
125. 8th International Conference on Business Information Systems (BIS 2005), Poznan, Poland, April 20 - 22, 2005.

126. International Conference on Coding and Computing (ITCC'05), Las Vegas, USA, April 11-13, 2005.
127. 5th International Conference on Recent Advances in Soft Computing (RASC 2004), Nottingham, UK, December 16-18, 2004.
128. International Conference on Knowledge Management (ICKM'04), Singapore, December 13-15, 2004.
129. 2004 IEEE/WIC International Conference on Web Intelligence (WI 2004), Beijing, China, September 20-24, 2004.
130. International Conference on Signal Processing, Anakkale, Turkey, September 15-17, 2004.
131. 2004 International Conference on Artificial Intelligence and Neural Networks, Anakkale, Turkey, July 14-16, 2004.
132. 2004 IEEE Congress on Evolutionary Computation (CEC2004), Portland, USA, 19-23 June 2004.
133. International Conference on Educational Technologies, Anakkale, Turkey, May 26-28, 2004.
134. International Conference on Coding and Computing (ITCC'04), Las Vegas, USA, April 05-07, 2004.
135. 7th International Conference on Business Information Systems, BIS'04, Poznan, Poland. April 21-23, 2004.
136. 2004 International Workshop on Hybrid Methods for Adaptive Systems, Aachen, Germany, 10-12 June 2004.
137. 10th International Mendel Conference on Soft Computing (MENDEL'04), Brno, Czech Republic, June 2004.
138. HiPC 2003 Workshop on Soft-Computing (WoSCo'03), Hyderabad, India, December 2003.
139. 8th Online World Conference on Soft Computing in Industrial Applications WSC 8, September 29th-October 10th, 2003.
140. 2003 MidSouth Computational Biology and Bioinformatics Society (MCBIOS), Arkansas, USA, 2003.
141. 2003 IEEE/WIC International Conference on Web Intelligence (WI 2003), Beijing, China, October 2003.
142. 2003 IEEE Congress on Evolutionary Computation (CEC2003), Canberra, Australia, December 8-12, 2003. 88. International Conference on Applied Artificial Intelligence, 15-17, December 2003, India.
143. Knowledge-Based Intelligent Information & Engineering Systems, 3- 5 September 2003, Oxford, United Kingdom.
144. 12th International Conference on Intelligent and Adaptive Systems and Software Engineering, July 9-11, 2003, San Francisco, USA.
145. 7th International Work Conference on Artificial and Natural Neural Networks, June 3-6, 2003, Spain.
146. 9th International Mendel Conference on Soft Computing (MENDEL'03), Brno, Czech Republic, June 2003.
147. HiPC 2002 Workshop on Soft Computing (WoSCo'02), December 18, 2002, India.
148. 7th Online World Conference on Soft Computing in Industrial Applications (WSC7), 23 September - 10 October 2002.
149. 2002 WSES International Conference on Mathematics, Optimization and Applications, Poland, 01-05 September 2002.
150. 2002 International Conference on Machine Learning and Applications (ICMLA'02), June 2002.
151. 8th International Mendel Conference on Soft Computing, Brno, Czech Republic, June 2002.

152. 2001 WSES International Conference on Mathematics, Optimization and Applications, Cairns, Australia, 17-21 December 2001.
153. 7th International Mendel Conference on Soft Computing, Brno, Czech Republic, June 2001. 100. The 2001 International Conference on Artificial Intelligence, ICAI 2001, Las Vegas, USA, June 2001.
154. The 2001 International Conference on Mathematics and Engineering Techniques in Medicine and Biological Sciences, METMBS'01, Las Vegas, USA, June 2001.

### **Organization of Special Sessions/Workshop/Track**

1. Fourth International Workshop on Evolutionary Multiobjective Optimization – Design and Applications (EMODA'08), Kaohsiung, Taiwan, October 2008.
2. The 2nd International Workshop on Web Grid based Virtual Laboratories, Experimenting and Simulation (WG-LES2008), Kaohsiung, Taiwan, October 2008.
3. Workshop on Intelligent Soft Computing Approaches to Multimedia Processing (ISCAMP'2008), Kaohsiung, Taiwan, October 2008.
4. International Workshop on Intelligent Soft Computing Approaches to Multimedia Processing, (ISCAMP'2007), Kaohsiung City, Taiwan, November 26-28, 2007.
5. Hybrid Artificial Intelligence Systems Workshop (HAIS'07 - CAEPIA'07) in Conjunction with The Conference of the Spanish Association for Artificial Intelligence (CAEPIA), Salamanca, Spain, November 2007.
6. EMOA'07: International Workshop on Evolutionary Multiobjective Optimization: Design and Applications in conjunction with The Seventh International Conference on Intelligent Systems Design and Applications, ISDA'07, Rio de Janeiro, Brazil, October 22-24, 2007.
7. 1st International Workshop on Web Grid based Virtual Laboratories, Experimenting and Simulation (WG-LES2007) in conjunction with The Seventh International Conference on Intelligent Systems Design and Applications, ISDA'07, Rio de Janeiro, Brazil, October 22-24, 2007.
8. NCA'07: Natural Computing and Applications, in conjunction with 8th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing Timisoara, Romania, September 26-29, 2007.
9. International Workshop on Intrusion Prevention Systems (IWIPS'07), in conjunction with The Third International Symposium on Information Assurance and Security (IAS'07), Manchester, United Kingdom, August 29 - 31, 2007.
10. International Workshop on Soft Computing in Intelligent Multimedia, Seoul Olympic Parktel, Seoul, Korea, April 26-28, 2007.
11. IAPLM'06: The First International Workshop on Intelligent Application in Product Lifecycle Management, Jinan, China, October 16-18, 2006.
12. EMOA'06: International Workshop on Evolutionary Multiobjective Optimization: Design and Applications in conjunction with The Sixth International Conference on Intelligent Systems Design and Applications, ISDA'06, Jinan, China, October 16-18, 2006.
13. SIP'06: Swarm Intelligence and Patterns, SIP'05: Swarm Intelligence and Patterns, in conjunction with The Sixth International Conference on Intelligent Systems Design and Applications, ISDA'06, Jinan, China, October 16-18, 2006.
14. NCA'06: Natural Computing and Applications, in conjunction with 8th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing Timisoara, Romania September 26-29, 2006.
15. Session on 'Hybrid Neurocomputing in Financial Modeling and Forecasting' in conjunction with The Third International Symposium on Neural Networks (ISNN 2006), Chengdu, China, May 29-31, 2006.

16. NCA'05: Natural Computing and Applications, in conjunction with 7th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing, Timisoara, Romania, September 25 - 29, 2005.
17. EMOA'05: International Workshop on Evolutionary Multiobjective Optimization: Design and Applications (EMOA'05), in conjunction with 5th International Conference on Intelligent Systems Design and Applications, ISDA'05, Wroclaw, Poland, September 08-10, 2005.
18. IAS'05: Information Assurance and Security, in conjunction with International Conference on Information Technology: Coding and Computing (ITCC 2005), April 11-13, 2005, Las Vegas, USA.
19. SIP'05: Swarm Intelligence and Patterns, in conjunction with The Fourth International Workshop on Soft Computing as Transdisciplinary Science and Technology, WSTST'05, Muroran, Japan, May 25-27, 2005.
20. SIP'04: Swarm Intelligence and Patterns, International Workshop Session in conjunction with ISDA'04 - 4th International Conference on Intelligent Systems Design and Applications, August 26-28, 2004, Budapest, Hungary.
21. IAS'04: Information Assurance and Security, International Conference on Information Technology: Coding and Computing (ITCC 2004), April 5-7, 2004, The Orleans, Las Vegas, Nevada, USA.
22. NF'03: Neural Network and Fuzzy Systems, 7th International Work Conference on Artificial and Natural Neural Networks, June 3-6, 2003, Spain.
23. CIM'03: Computational Intelligence in Management, 2003 EURO/INFORMS Joint International Meeting, July 6, 2003 - July 10, 2003 Istanbul, Turkey.

#### **Technical Reviews for International Journals**

1. IEEE Intelligent Systems
2. European Journal of Operational Research
3. IEEE Transactions on Neural Networks
4. Fuzzy Sets and Systems, Elsevier Science, Netherlands
5. IEEE Transactions on Knowledge and Data Engineering
6. IEEE Transactions on Fuzzy Systems
7. IEEE Transactions on Systems, Man and Cybernetics
8. IEEE Transactions on Evolutionary Computation
9. IEEE Power Engineering Transactions, IEEE Power Engineering Society, USA
10. International Journal of Approximate Reasoning, Elsevier Science, Netherlands
11. Web Intelligence and Agent Systems, WIAS Journal, IOS Press, Netherlands
12. Engineering Applications of Artificial Intelligence, Elsevier Science, Netherlands
13. Applied Soft Computing, Elsevier Science, Netherlands
14. Applied Intelligence, Kluwer Academic Publishers, The Netherlands
15. DNA and Cell Biology
16. ACM SIGKDD Explorations
17. International Journal of Intelligent and Fuzzy Systems, IOS Press, Netherlands
18. Journal of Fuzzy Optimization and Decision Making, Kluwer Academic Publishers, USA
19. Neurocomputing Journal, Elsevier Science, Netherlands
20. Information Sciences, Elsevier Science, Netherlands
21. Decision Support Systems, Elsevier Science, Netherlands
22. Journal of Network and Computer Applications, Elsevier Science, Netherlands
23. International Journal of Neural Computing Applications, Springer-Verlag, London

24. International Journal of Neural, Parallel & Scientific Computations, USA
25. International Journal of Control and Intelligent Systems, IASTED, Canada
26. Parallel and Distributed Computing Practices, Nova Publishers, USA
27. Informatica - An International Journal of Computing and Informatics
28. Bioinformatics Journal, European Bioinformatics Institute
29. ACM Computing Reviews, Association for Computing Machinery, USA
30. ACM Crossroads
31. International Journal of Production Research, Taylor and Francis, UK
32. Genetic Programming and Evolvable Machines, Springer Verlag, Germany
33. Image Processing and Communications: An International Journal, Poland
34. Arabian Journal of Computer Science, Saudi Arabia
35. International Journal of Network Security, Taiwan
36. Artificial Intelligence in Medicine, Elsevier Science, Netherlands

#### **Faculty Promotion Committees Served**

- *Lecturer to Senior Lecturer*, University of Manchester, Manchester, UK (2006)
- *Assistant Professor to Associate Professor*, Southern Illinois University, Carbondale, IL, USA (2006)
- *Lecturer to Senior Lecturer*, Monash University, Melbourne, Australia (2007)
- *Reappointment as Associate Professor*, Nanyang Technological University, Singapore (2007)

#### **Faculty Services**

1. Department of Computer Science, Oklahoma State University, Faculty Search Committee Member (2002 - 2003).
2. Department of Computer Science, Oklahoma State University, Faculty Graduate Committee Member (2002-2003).

#### **Evaluator of Research Grant Applications**

1. University of Leuven, Belgium.
2. King Fahd University of Petroleum and Minerals, Saudi Arabia.
3. Czech Academy of Sciences, Prague, Czech Republic.
4. Arab Open University, Kuwait.

#### **PROFESSIONAL MEMBERSHIPS AND TECHNICAL SOCIETY/WORKING GROUP MEMBERSHIPS**

1. Senior Member, IEEE - Institution of Electrical Electronics Engineers Inc, USA
2. Senior Member, IEEE Computer Society, USA
3. Member, IEAust - Institution of Engineers, Australia
4. Member, IEE - Institution of Electrical Engineers, United Kingdom
5. Member, ACM - Association for Computing Machinery, USA
6. Member, WFSC - World Federation on Soft Computing
7. Member, EUSFLAT - European Society for Fuzzy Logic and Technology, (Working Group on Neuro-Fuzzy Systems)
8. Member, EvoNet, European Network for Excellence in Evolutionary Computing
9. Member, EU/ME, European Chapter on Metaheuristics, Working Group of the The Association of European Operational Research Societies, Europe

#### ACADEMIC FELLOWSHIPS / TRAVEL GRANTS

1. Center of Excellence in Information Technology and Telecommunications, State of Oklahoma, US\$1,500, 2003.
2. Cognitive and Neural Systems (ICCNS'02), Fellowship funded by the Office of Naval Research: US\$1,500, 2002.
3. Cognitive and Neural Systems (ICCNS'01) Fellowship funded by Office of Naval Research: US\$1,367, 2001.
4. Monash Postgraduate Travel Fellowship for AU\$1,500.00 (May 2001).
5. Monash Postgraduate Travel Fellowship for AU\$1,915.00 (December 2000).
6. Monash Post Graduate Travel Fellowship for AU\$1,665.00 (April 2000).
7. Monash Graduate Fellowship (AU\$17,606.00/annum, 1999-2001).

#### MISC. INFORMATION

##### **Personal Details, Special Skills etc.**

- Citizenship: Australian (naturalized)
- Management: Collaborative research, software project management, business start-up planning.
- Software development: Algorithms
- Programming languages: C, C++, FORTRAN
- Software: MATLAB, AutoCAD, Visio, PSpice, TLCADD etc.,
- Operating Systems: DEC UNIX, SGI IRIX, Microsoft Windows

#### REFERENCES

**Available upon request**

I hereby state that the statements made above are true to the best of my knowledge and belief. For further information, please feel free to contact me.

*Ajith Abraham*