Dr. BHUVANESWARAN R S
Professor, Ramanujan Computing Centre

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Present Position

Professor, Ramanujan Computing Centre, College of Engineering Guindy, Anna University, Chennai from August-2010.

Present Additional Responsibility

➢ Professor Incharge, University Library, Anna University, Chennai.

Previous Positions

➢ Lecturer, Ramanujan Computing Centre, College of Engineering Guindy, Anna University, Chennai during December-1998 and August-2004.

Degree

❖ M.Tech. in COMPUTER SCIENCE ENGINEERING , Pondicherry University, Pondicherry University (1995 - 1996).

Research Degree

❖ Postdoctoral Research in GRID COMPUTING from Faculty of INFORMATION AND COMMUNICATION ENGINEERING, NAGOYA INSTITUTE OF TECHNOLOGY, JAPAN, NAGOYA INSTITUTE OF TECHNOLOGY, JAPAN (JSPS) (2004 - 2006).
Title: COALLOCATION MODELS FOR GRID COMPUTING.

❖ Ph.D. in DISTRIBUTED COMPUTING, WIRELESS SENSOR NETWORK from Faculty of INFORMATION AND COMMUNICATION ENGINEERING, COLLEGE OF ENGINEERING, GUINDY, ANNA UNIVERSITY (1999 - 2003).
Title: COLLISION AVOIDANCE AND ENERGY EFFICIENT PROTOCOLS SOLUTIONS TO THE DISTRIBUTED SYSTEM OF WIRELESS SENSOR NETWORKS.

Area of Specialisation

➢ MOBILE COMPUTING, WIRELESS SENSOR NETWORKS, IMAGE SECURITY, CRYPTOGRAPHY

Membership in Professional Organization

- ➤ COMPUTER SOCIETY OF INDIA (FELLOW)

- ➤ INSTITUTE OF ELECTRICAL, INFORMATION,COMMUNICATION ENGINEERS (MEMBER)

- ➤ International Association of Computer Sciene and Information Technology

- ➤ Society of Digital Information and Wireless Communication

Research Guidance

Number of Ph.D Scholars Guided	: 11
Number of Ph.D Scholars Guiding	: 6
Number of M.E./ M.Tech. Projects Guided	: 44
Number of M.E./ M.Tech. Projects Guiding	: 4
Number of Ph.D Scholars Guided as Joint-Supervisor	: 3
Number of Ph.D Scholars Guiding as Joint-Supervisor	: 1

Papers Published in Journals

Research Papers Published in International Journals	: 43
Research Papers Published in National Journals	: 2

1. R.S.Bhuvaneswaran, J.L.Bordim, J.Cui, K.Nakano, N.Ishii, "Fundamental Protocol to gather Information from Wireless Sensor Network", IEICE Transaction on Fundamentals of Computing, Issue 11, pp. 2479-2488 (2002).

2. R.S.Bhuvaneswaran, J.L.Bordim, J.Cui, K.Nakano, "Energy-efficient Initialization Protocol for Wireless Sensor Network with No-CD", IEICE Transaction on Fundamentals of Computing, Issue 2, pp. 447-454 (2002).

3. D.Sivakumar, R.S.Bhuvaneswaran, "Proposal on Multi agent Ants based Routing Algorithm for Mobile Adhoc Networks", International Journal of Computer Science and Network Security, Vol. 7, Issue 6, pp. 260-268 (2007).

4. R.S. Bhuvaneswaran, Yoshiaki Katayama, Naohisa Takahashi, "A Framework for an integrated Co-allocator for Data Grid in Multi-sender Environment", IEICE Transaction on Communications, Issue 4, pp. 742-749 (2007).

5. Fang Jing, R.S.Bhuvaneswaran, Yoshiaki Katayama, Naohisa Takahashi, "Adaptive Route Selection Policy Based on Back Propagation Neural Networks", Journal of Networks, published by Academy Publisher. Vol. 3, Issue 3, pp. 34-41 (2008).

6. D.Sivakumar, R.S.Bhuvaneswaran, "ALRP: scalability study of ant based local repair routing protocol for mobile adhoc networks", WSEAS Transactions on Computer Research , Vol. 3, Issue 4, pp. 105-111 (2008).

7. D.Sivakumar, R.S.Bhuvaneswaran, "MARP: Multi Ant Based Routing Protocol for Mobile Adhoc Networks", Journal of Mobile Communication, Vol. 4, Issue 4, pp. 105-111 (2008).

8. U.Sakthi, R.Hemalatha, R.S.Bhuvaneswaran,, "Parallel and Distributed Mining of Associative rule on Knowledge Grid", World Academy of Science, Engineering & Technology, Vol. 9, Issue 1, pp. 316-320 (2008).

9. U.Sakthi, R.S.Bhuvaneswaran, "Incremental Data Grid Mining Algorithm for Mobility Prediction of Mobile Users", Journal of Computer Science, Vol. 5, Issue 2, pp. 146-153 (2009).

10. R.Anbuselvi, R.S.Bhuvaneswaran, "Simulation of Path Finding Algorithm : Bird's eye perspective", International journal of Advanced Science & Technology, Vol. 9, Issue 9, (2009).

11. U.Sakthi, R.S.Bhuvaneswaran, "Mobility Prediction of Mobile Users in MobileEnvironment Using Knowledge Grid", International Journal of Computer Science and Network Security, Vol. 9, Issue 1, pp. 303-309 (2009).

12. Fang Jing, R.S.Bhuvaneswaran, Yoshiaki Katayama, Naohisa Takahashi, "AODV based multipath routing protocol for path preferential probabilities", International Journal on Wireless and Mobile Computing, Vol. 3, Issue 3, pp. 156-164 (2009).

13. Fang Jing, R.S.Bhuvaneswaran, Yoshiaki Katayama, Naohisa Takahashi, "On-demand multipath protocol with adaptive routing method by back propagation neural networks", International Journal of Communication Networks and Distributed Systems, published by Inderscience Publications. Vol. 3, Issue 1, pp. 15-35 (2009).

14. Shatheesh Sam, P Devaraj, R S Bhuvaneswaran, "Enhanced substitution-diffusion based image cipher using improved chaotic map", Proceedings of International conference on Advanes in Information and communication technologies, published by Springer. Vol. 4, Issue 1, pp. 116-123 (2010).

15. Soundararajan, S and Bhuvaneswaran,R.S, "Multipath Routing backbone for improving QoS in Mobile ad hoc networks", European Journal of Scientific Research, Vol. 53, Issue 2, pp. 222-230 (2011).

16. I. Shatheesh Sam, P. Devaraj and R. S. Bhuvaneswaran, "Block Cipher Scheme for Image Cryptosystem Using Alternative Chaotic Maps", European Journal of Scientific Research, Vol. 51, Issue 4, pp. 232-240 (2011).

17. U.Sakthi, R.S.Bhuvaneswaran, " Data Grid Mining of Mobile User behaviors in Web Environment", European Journal of Scientific Research, Vol. 49, Issue 4, pp. 555-566 (2011).

18. Anjana Devi, R.S.Bhuvaneswaran, "Adaptive Association Rule Mining Based Cross Layer Intrusion Detection System For Manet", International Journal of Network Security & Its Applications, Vol. 3, Issue 5, pp. 243-256 (2011).

19. I. Shatheesh Sam, P. Devaraj and R. S. Bhuvaneswaran, " A novel image cipher based on mixed transformed logistic maps", International Journal on Multimedia Tools and Applications, published by Springer. Vol. 56, Issue 2, pp. 315-330 (2012).

20. Vydeki, D. and Bhuvaneswaran, R.S., "Design of Wireless IDS using Adaptive Neuro-fuzzy Inference System", European Journal of Scientific Research, Vol. 90, Issue 1, pp. 149-156 (2012).

21. I. Shatheesh Sam, P. Devaraj and R. S. Bhuvaneswaran, "An intertwining chaotic maps based image encryption scheme", International Journal on Nonlinear Dynamics, published by Springer. Vol. 69, Issue 2, pp. 1995-2007 (2012).

22. Vydeki Dharmar, Ayisha Razeena Parveen, M.A. Bhuvaneswaran, R.S, "Blackhole Detection in Ad hoc Networks using Neural Networks", Journal of Innovation in Computer Science and Engineering, Vol. 2, Issue 1, pp. 29-33 (2012).

23. Soundararajan, S. and Bhuvaneswaran, R.S, "Ant Based Multipath Routing for Load Balancing and Congestion Control in MANET", Journal of Information and Computational Science, Vol. 9, Issue 12, pp. 3365-3377 (2012).

24. Soundararajan, S. and Bhuvaneswaran, R.S, "Adaptive Multipath Routing for Load Balancing in Mobile Ad Hoc Networks", Journal of Computer Science, Vol. 8, Issue 5, pp. 648-655 (2012).

25. Soundararajan, S. and Bhuvaneswaran, R.S., "Multipath Rate Based Congestion Control for Mobile Ad Hoc Networks", International Journal of Computers and Applications, Vol. 55, Issue 1, pp. 42-47 (2012).

26. Soundararajan, S. and Bhuvaneswaran, R.S, "An Efficient Route Selection Policy for Multipath Routing in MANET", Journal of Innovation in Electronics and Communication, Vol. 2, Issue 2, pp. 58-63 (2012).

27. Soundararajan.S and Bhuvaneswaran R.S, "Adaptive Loss Recovery Techniques for Multipath Routing in MANETs", Journal of Innovation in Electronics and Communication, Vol. 3, Issue 1, pp. 6-11 (2013).

28. Vydeki, D. and Bhuvaneswaran, R.S., "Effect of Clustering Designing a Fuzzy based Hybrid Intrusion Detection System for Mobile Ad hoc Networks", Journal of Computer Science, Vol. 9, Issue 4, pp. 521-528 (2013).

29. S.Vimala, H.Khanna Nehemiah, R.S.Bhuvaneswaran and G Saranya, " Design Methodology For Relational Databases: Issues Related To Ternary Relationships In Entity- Relationship Model And Higher Normal Forms", International Journal of Database Management Systems, Vol. 5, Issue 3, pp. 15-37 (2013).

30. M Sujatha, R.S.Bhuvaneswaran, " Cognitive group leader selection algorithm for wireless sensor networks", Research Journal of Applied Sciences, Engineering and Technology, published by Maxwell Science Publishing. Vol. 8, Issue 24, pp. 2403-2407 (2014).

31. R.Hemalatha, R.S. Bhuvaneswaran, "Link stability and energy aware multipath routing in MANET", Research Journal of Applied Sciences, Engineering and Technology, published by Maxwell. Vol. 8, Issue 21, pp. 2179-2186 (2014).

32. R.Hemalatha, R.S. Bhuvaneswaran, "Energy Realization fisheye state routing algorithm for mobile adhoc networks", Journal of Theoretical and Applied Information Technology, published by LLS. Vol. 70, Issue 1, pp. 172-176 (2014).

33. P.Kalpana Devi, R.S.Bhuvaneswaran, " Design of Frequency Response Masking Technique Based Filter Bank Structure", Indian Journal of Engineering Research & Technology , published by GBS Publisher. Vol. 2, Issue 1, pp. 1-6 (2014).

34. I. Shatheesh Sam, P. Devaraj, R.S.Bhuvaneswaran, "An Efficient Quasigroup Based Image Encryption Using Modified Nonlinear Chaotic Maps", Sensing and Imaging, published by Springer. Vol. 6, Issue 1, pp. 91 (2014).

35. Kalpana Devi, Bhuvaneswaran R S, "Design Of Improved Transmultiplexers For Cognitive Radio Applications", Indian Journal of Applied Research, published by Indian Journal of applied reserach. Vol. 4, Issue 6, pp. 1-4 (2014).

36. Sujatha.M, Bhuvaneswaran.R.S., "Modified Intra-Cluster Grouping Scheme to Avoid Hidden Node Collision in Standard IEEE 802.15.4 Wireless Sensor Network", Asian Journal of Information Technology, (2014).

37. Shanthi.P, Bhuvaneswaran.R.S., "Robust Chaos Based Image Watermarking Scheme for Fractal-Wavelet", Applied Mathematical Sciences, published by Hikari International publisher. Vol. 8, Issue 32, pp. 1593-1604 (2014).

38. R.Hemalatha, R.S. Bhuvaneswaran, "Reliable ENergy aware end to end delivery routing protocol for mobile adhoc networks", IJAER, published by IJAR. Vol. 1, Issue 1, pp. 1-6 (2015).

39. P Kalpana Devi, RS Bhuvaneswaran, "Improved Non Uniform Transmultiplexers for Channelization", Indian Journal of Science and Technology, published by IJST. Vol. 8, Issue 5, pp. 466-471 (2015).

40. Sujatha M, Bhuvaneswaran RS, "An Efficient Beam Scanning Algorithm for Hidden Node Collision Avoidance in Wireless Sensor Networks", Advanced Computer and Communication Engineering Technology, published by Springer. pp. 627-639 (2015).

41. R.Amuthavalli, R.S.Bhuvaneswaran, "Genetic Algorithm Enabled Prevention of Sybil Attacks forLEACH-E", Modern Applied Science, published by Canadian Center of Science and Education. Issue 9, pp. 41 (2015).

42. P.Shanthi, R.S.Bhuvaneswaran, "Image Watermarking Using Fibonacci Transform", Asian Journal of Information Technology, published by Medwell Journals. Vol. 15, Issue 9, pp. 1431-1436 (2016).

43. M.Sujatha, R.S.Bhuvaneswaran, " Intra-Cluster Grouping Mechanism for an Energy Efficient Beam Scanning Algorithm to Avoid Hidden Node Collision in Wireless Sensor Networks", Sensor Letters, published by American Scientific Publishers. Vol. 14, Issue 15, pp. 490-500 (2016).

44. S Soundararajan, R S Bhuvaneswaran, " Reliable and Fault-Tolerant k-Local Mutual Exclusion Algorithm Using Fuzzy Logic for Mobile Ad-Hoc Network", Journal of Computational and Theoretical Nanoscience, published by American Scientific Publishers. Vol. 14, Issue 8, pp. 3967-3973 (2017).

45. P. Kalpana Devi, R.S. Bhuvaneswaran, " Linguistic Effects Based Novel Filter for Hearing Aid to Deliver Natural Sound and Speech Clarity in Universal Environment", Wireless Personal Communication, published by Springer publications. Vol. 94, Issue 3, pp. 1223-36 (2017).

Papers Presented in Programmes

Research Papers Presented in International Programmes   : 6
Research Papers Presented in National Programmes   : 0

1. Bhuvaneswaran.R.S and Jayasree N, "Z-Transform Based Digital Image Watermarking Scheme with DWT and Chaos" presented in a International level conference on International Conference on Advanced Computing, Networking and Informatics, organised by Springer India, India .

2. R.S.Bhuvaneswaran, Tatsuya Hayashi, V.Sankaranarayanan, "Task Merging and Task Duplication schemes for Scheduling Problems" presented in a International level conference on SNPDP 2011, organised by IEEE, Nagoya Chapter, Japan from 20-Aug-2001 to 21-Aug-2001.

3. R.S.Bhuvaneswaran, V.Sankaranarayanan, "A Genetic Broadcast Scheduling Algorithm for Packet Radio Networks" presented in a International level conference on ICAIET 2002, organised by University Malaysia Sabah, Malaysia from 17-Jun-2002 to 19-Jun-2002.

4. R.S.Bhuvaneswaran, Y. Katayama, N. Takahashi, "Dyanmic Co-allocation Scheme for Parallel Data Transfer in Grid Environment" presented in a International level conference on SKG 2005(International Conference on Semantics, Knowledge and Grid), China from 28-Nov-2005 to 31-Oct-2005.

5. Jayasree N, Bhuvaneswaran.R.S., "IMAGE SECURITY WITH CHAOTIC DIGITAL WATERMARKING SCHEME USING Z-TRANSFORMATION" presented in a International level conference on Advancement of Materials, Health and Safety, organised by JSPS, AERB, IJAA, India from 07-Aug-2014 to 08-Aug-2014.

6. Bhuvaneswaran.R.S and Jayasree.P, "Chebyshev transformation based chaotic cipher for digital watermarking" presented in a International level conference on Contemporary Advances of Science and Technology, organised by IJAA-JSPS and Banaras Hindu University, Varanasi, India from 07-Aug-2015 to 09-Aug-2015.

Programme Chaired

1. Chairman, International level conference.

Programme Organized

1. Coordinator, National level Short Course on "A Practical approach to Software Engineering" from 09-Jul-2001 to 20-Jul-2001.

2. Coordinator, National level workshop on "Workshop on Adhoc Networks" from 05-Feb-2007 to 06-Feb-2007.

3. Coordinator, National level Short Course on "Recent Trends in Network Security" from 02-Mar-2009 to 15-Mar-2009.

4. Coordinator, National level workshop on "Writing Effective Conference Papers" from 18-Feb-2012 to 19-Feb-2012.

5. Coordinator, National level workshop on "Database Management Systems" from 21-May-2013 to 31-May-2013.

Programme Attended

1. Attended a National level Short Course on "Advances in Information Systems" organized by IIT, Kharagpur, India from 04-Jul-1994 to 08-Jul-1994.

2. Participated in a National level workshop on "Recent Trends in Parallel and Distributed Computing" organized by Pondicherry University, India from 24-Dec-1996 to 24-Dec-1996.

3. Attended a National level Short Course on "Orientation Course for College & University Teachers " organized by Pondicherry University, India from 20-Nov-1997 to 12-Dec-1997.

4. Attended a National level Short Course on "Information Management in Engineering College Libraries" organized by Pondicherry University, India from 22-Jun-1998 to 04-Jul-1998.

5. Attended a National level Short Course on "Multimedia Communication" organized by IIT Madras, India from 24-Nov-1998 to 04-Dec-1998.

6. Attended a National level Short Course on "Internet and Web page Design" organized by Anna University, Chennai, India from 31-May-1999 to 11-Jun-1999.

7. Attended a International level Short Course on "Computer Communication" organized by Anna University, Chennai, India from 20-Dec-1999 to 31-Dec-1999.

8. Participated in a International level workshop on "Empowering Teachers for Enhancing SC/ST Students Employability" organized by Anna University, Chennai, India from 03-May-2010 to 07-May-2010.

9. Participated in a National level workshop on "Effective Teaching/Learning of Computer Programming" organized by IIT, Bombay, India from 28-Jun-2010 to 10-Jul-2010.

10. Participated in a National level workshop on "Database Management System" organized by IIT Bombay, India from 13-Dec-2010 to 23-Dec-2010.

11. Participated in a National level workshop on "ISTE coordinators workshop on Database management systems" organized by ISTE and IIT, Bombay, India from 06-May-2013 to 10-May-2013.

12. Attended a National level Short Course on "Advances in Databases and Datamining" organized by Anna University, Chennai, India from 16-Feb-2015 to 01-Mar-2015.

13. Attended a National level Short Course on "Regional Training Programme on URKUND-An Antiplagiarism Detection Tool" organized by Anna University, Chennai, India from 22-Sep-2015 to 22-Sep-2015.

14. Attended a National level Short Course on "Evolving Synergy of Statistical Analysis" organized by National Institute of Technology, Hamirpur, HP, India from 21-Dec-2015 to 25-Dec-2015.

15. Participated in a National level workshop on "Workshop on National Knowledge Network" organized by JNTU, Hyderabad, India from 21-Jan-2016 to 22-Jan-2016.

Special Reprasentations

1. Executive Committee member in Indian JSPS Alumni Association from 05-Jun-2006 to09-Jun-2017.

2. Associate Fellow in Institute of Electrical, Information and Communication Engin from 09-Jun-2008 to09-Jun-2017.

Honours

1. "JSPS Post Doctoral Fellow" given by Japan Society of Promotion of Science & Technology from Japan (2004).

Experience Abroad

1. HOBART, AUSTRALIA . Purpose of visit :CONFERENCE PAPER PRESENTATION.

2. Visited NATIONAL UNIVERSITY OF SINGAPORE, SINGAPORE . Purpose of visit :LABORATORY VISIT.

3. MALAYSIA . Purpose of visit :CONFERENCE PAPER PRESENTATION.

4. Visited NAGOYA INSTITUTE OF TECHNOLOGY, JAPAN from 20-Sep-2000 to 04-Apr-2001. Purpose of visit :PhD EXCHANGE PROGRAMME.

5. Visited NAGOYA INSTITUTE OF TECHNOLOGY, JAPAN from 25-Oct-2004 to 28-Feb-2007. Purpose of visit :POST DOCTORAL RESEARCH.

6. CHICAGO, USA from 18-Dec-2006 to 22-Dec-2006. Purpose of visit :CONFERENCE PAPER PRESENTATION.

7. BEIJING, CHINA from 11-Nov-2013 to 15-Feb-2013. Purpose of visit :CONFERENCE PAPER PRESENTATION.

8. Visited Nagoya Institute of Technology through JSPS, Japan from 29-Sep-2016 to 31-Oct-2016. Purpose of visit :Bridge Fellowship.

Invited Lectures

1. Delivered a Lecture on "Grid Computing and Data Grid" in Recent Trends in Parallel & Distributed Systems organized by Pondicherry Engineering College, Pondicherry (20-Nov-2009).

2. Delivered a Lecture on "Key Management" in FDP on Cryptography organized by Anna University, Chennai, India (15-Sep-2011).

3. Delivered a Lecture on "Transmission Error Detection & Correction" in Data Communication and Networking organized by NITTTR, Chennai, Chennai, India (16-Feb-2012).

4. Delivered a Lecture on "Data Grid" in AICTE-QIP sponsored STC on Cloud Computing Technologies organized by College of Engineering, Guindy, Anna University, Chennai (01-Apr-2013).

5. Delivered a Lecture on "Visual Cryptography" in Indian Science Congress organized by Institution of Engineers, Chennai, India (20-Dec-2013).

6. Delivered a Lecture on "Visual Cryptography and Digital Image Watermarking" in IEEE Madras Chapter organized by IEEE Computer Society, IEEE Madras Section Office, Chennai 600025 (27-Feb-2016).

7. Delivered a Lecture on "Basics of Network Simulator" in Workshop on NS3 organized by Anna University, Ramanujan Computing Centre, College of Engineering (25-Feb-2017).