

VITA
January 2018

BHARAT BHARGAVA

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EDUCATION

1966 B.S. Mathematics (Honors), Punjab University
1969 B.E. Electrical Communication Engineering (With Distinction), Indian Institute of Science, Bangalore
1974 MS and Ph.D., Electrical and Computer Engineering, Purdue University
1971-73 Thirty credit hours toward M.S. in Industrial Administration, Purdue University

PROFESSIONAL EXPERIENCE

1973-76 Research Associate (Regenstrief Institute), Department of Medicine, Indiana University
1976-78 Assistant Professor, Cleveland State University
1978-summer Visiting Faculty, Stanford University
1978-84 Assistant Professor, University of Pittsburgh
1984-88 Associate Professor, Purdue University
1988- Professor, Purdue University
1991-2016 Summer Visiting Professor, ETH-Zurich and EPFL-Lausanne, Summer Visiting Fellow at Air Force and Naval Research Labs

HONORS AND AWARDS

1. Computer Science Department Corporate Partner's Research Award (voted by industrial partners), April, 2017
2. Helen Schleman Gold Medallion award for Advocating and Advancing Women students and Women issues, Mortar Board, Purdue University, 2017
<https://www.cs.purdue.edu/homes/bb/Awards2017/Board-of-Trustee-letter-SchlemanBhargava.pdf>
3. Focus Faculty Award for Outstanding Contributions to Disability Accessibility and Diversity, Purdue University, 2017
<https://www.cs.purdue.edu/news/Bhargava-Wins-Focus-Award.html>
https://www.cs.purdue.edu/homes/bb/focus_award_2017.pdf
4. Best Research Poster award, 6th International conference on Cloud Computing and Service Science (CLOSER), Rome, Italy, 2016
5. Diversity award by College of Science and CS, 2016
6. Best paper award, 6th International IEEE workshop on Dependable Network Computing and Mobile Systems held in conjunction with 34th Symposium on Reliable Distributed Systems (SRDS), Montreal, 2015

7. Best research poster award (voted by Corporate partners), Purdue CERIAS security center symposium, March, 2015
8. Hind Rattan award, India NRI welfare society, 2015
9. Bharat Gaurav award, India Friendship Society, 2014
10. Guest of Honor at Convocation of Chitkara University, Chandigarh, February, 2012
11. Best paper award in International Conference on Advances in Computing Communication – (ICACC), 2011, (Identity Management in Cloud)
<http://www.cs.purdue.edu/news/5-4-11ICACC.html>
12. Engagement award by College of Science and CS, 2011
13. Graduate mentoring award by College of Science and CS, 2009
14. Co-best paper award in Secure Knowledge Management Conference, Buffalo, 2005
15. Seed for Success award by Provost at Purdue, 2005.
16. Inducted in The Book of Great Teachers at Purdue, 2003.
17. Best idea paper, International Conference on Data Warehouse and Knowledge Management Conference, 2000.
18. Technical Achievement Award from IEEE Computer Society, 1999.
19. Outstanding Instructor Award (Purdue ACM Student Chapter), 1998.
20. Golden Core Member of IEEE Computer Society.
21. Outstanding Instructor Award (Purdue ACM Student Chapter), 1996.
22. Fellow of Institution of Electronics and Telecommunications Engineers (IETE).
23. Meritorious Service Certificate from IEEE Computer Society.
24. Fellow of Institute of Electrical and Electronics Engineers (IEEE).
25. Best Research Paper Award, IEEE Data Engineering Conference, 1988.
26. WHO'S WHO in Frontiers of Science and Technology.
27. SHELL fellowship, 1969 (Highest award to the best graduate student at Indian Institute of Technology, New Delhi).
28. Indian National Merit Scholarship, 1963-1969.
29. Merit List: Ranked 2nd out of 3500 students in Punjab University state wide examination, 1966.
30. Merit List: Ranked 13th out of 17000 students in Delhi Higher Secondary examination, 1963.

MEMBER OF PROFESSIONAL ORGANIZATIONS

1. Institute of Electrical and Electronics Engineers (IEEE).
2. Fellow of IEEE, Steering Committee of Technical Committee on Distributed Processing for Symposium on Reliable Distributed Systems.
3. Association of Computing Machinery.

4. Upsilon Pi Epsilon.
5. Institution of Electronics and Telecommunications Engineers (IETE).
6. Fellow of Institute of Electronics and Telecommunications Engineering (IETE)

RESEARCH INTERESTS

Cyber and Cloud Security, Intelligent Autonomous Systems, Data Analytics, Experiments in Communications and Networking Software, Secure Mobile Systems, Trust Management, Privacy in Data Access, Collaborative Attacks and Defense in Networks, Multi-media Security

PATENT

Method and System for Providing Cellular Assisted Secure Communication of a Plurality of Ad hoc Devices (With Motorola), US7817986 B2
http://www.cs.purdue.edu/news/10-31-11_Bhargava.html

RECENT Software and Demos

WaxedPrune System developed for demo in NGC Tech Fest 2016 and for deployment with NGC customers. (Joint work with MIT W3C.org)

Following Demos are available on link <https://www.cs.purdue.edu/homes/bb/#colloquia>

Moving Target Defense (MTD) Demo Video

Data Dissemination Demo Video

Secure Data Dissemination/Provenance Demo video

Secure/Resilient Systems Demo video

Google Scholar Citations

Citations	12844	3946
H-index	56	32
i10-index	200	82

PUBLICATIONS

1. Edited Proceedings

1. N. Adam, B. Bhargava, M. Halem, and Y. Yesha (eds.) ``Digital Libraries Research and Technology Advances,” edited proceedings, Springer-Verlag. Lecture Notes in Computer Science No. 1082, 1996, 290 pages and Adam, B. Bhargava, and Y. Yesha. ``Digital Libraries,” edited proceedings, Springer Verlag, Lecture Notes in Computer Science No. 916, December 1994, 321 pages.
2. N. Adam, B. Bhargava, and Y. Yesha. ``Knowledge and Information Management,” edited proceedings, ACM Press, 1994, 688 pages.

3. N. Adam and B. Bhargava. ``Advanced Database Concepts and Research Issues," edited proceedings, Springer Verlag, Lecture Notes in Computer Science No. 759, September 1993, 451 pages.
4. B. Bhargava. ``Parallel and Distributed Systems," edited proceedings, IEEE Press, 1993, 170 pages.
5. B. Bhargava, Y. Yesha, and T. Finin. ``Knowledge and Information Management," edited proceedings, ACM Press, 1993, 742 pages.

2. Books

6. Managing Trust in Cyberspace (Hardback) Edited by S. Thampi, B. Bhargava, and P. Atrey, CRC Press Inc, December 2013, ISBN 13: 9781466568440 ISBN 10: 1466568445
7. A. Helal, B. Bhargava, and A. Heddaya. ``Advanced Replication Techniques for Distributed Systems," Kluwer Academic Publisher, 1996, 150 pages.
8. B. Bhargava (ed.). ``Concurrency Control and Reliability in Distributed Systems," Van Nostrand and Reinhold, 1987.
9. CODASYL Systems Committee. A Framework for Distributed Database Systems: Distribution Alternatives and Generic Architectures, September 1982. Published by ACM. 134 pages.

3. Book Chapters

10. A. Zhang and B. Bhargava, ``Flexible Transaction Models", book chapter in: C. Panos (editor), Extended Transactions Models and Advanced Concurrency Control in Encyclopedia of Database Systems, C. Panos Editor, Springer Verlag, 2008
11. L. Lilien and B. Bhargava, "Privacy and Trust in Online Interactions," book chapter in: K. Chen and A. Fadlalla (eds.), "Online Consumer Protection: Theories of Human Relativism," Idea Group, 2007
12. G. Ding, X. Wu, and B. Bhargava. ``Cross-Layer Algorithm for Video Transmission over Wireless Network," in Handbook of Algorithms for Mobile and Wireless Networking and Computing, (A. Boukerche, ed.), CRC Press, 2005.
13. I. Chung, B. Bhargava, and S. Madria. ``Taxonomy of Data Management via Broadcasting in a Mobile Computing Environment." Book Chapter in Mobile Computing: Implementing Pervasive Information and Communication Technologies, Kluwer Academic Publishers, December 2002.
14. S. Madria, B. Bhargava, M. Mohania, and S. Bhowmick. ``Data and Transaction Management in a Mobile Environment." Book Chapter in Mobile Computing: Implementing Pervasive Information and Communication Technologies, Kluwer Academic Publishers, December 2002.
15. B. Bhargava and A. Helal. ``Configurable Distributed Database Systems: Living with Failures and Surviving Catastrophes," Tutorial Notes, IEEE Press, October 1993.
16. H. Tirri, J. Srinivasan, and B. Bhargava. ``Integrating Distributed Data Sources Using Federated Objects," in Distributed Object Management, (T. Ozsu, U. Dayal, and P. Valduriez, eds.), Morgan Kaufmann Publisher, Inc., June 1993.
17. B. Bhargava and Y. Jiang. ``Transition from Relational to Object Model Implementation," in Advanced Database Concepts and Research Issues, (N. Adam and B. Bhargava, eds.), Springer Verlag, Lecture Notes in Computer Science, No. 759, September 1993.

18. B. Bhargava, Y. Zhang, and E. Mafla. "Communication Facilities for Distributed Transaction Processing Systems," in Readings in Distributed Computing Systems, (T. Casavant and M. Singhal. eds.), IEEE Press, November 1992.
19. B. Bhargava and L. Lilien. "Expert Systems for Fault Tolerant Distributed Database Systems," Essays in Computer Vision and other topics, (Julious Tou, ed.), (dedicated to Professor K.S. Fu), pp. 41-182. June 1990. Published by Academic Sinica.
20. B. Bhargava. "Concurrency Control and Reliability in Distributed Database System," in Software Engineering Handbook, Van Nostrand Reinhold Company, 1983, pp. 331-358.
21. B. Bhargava. "Design of Intelligent Query Systems for Large Databases," in Pictorial Information Systems, Springer-Verlag, May 1980, pp. 431-445

4. Research Journals

Submitted

22. A. Hu, R. Jiang, B. Bhargava, Identity-Preserving Public Integrity Checking with Dynamic Groups for Cloud Storage, Submitted to IEEE Transactions on Cloud Computing
23. S. Han and B. Bhargava, "TSUA: Trust-based Strong User Authentication Scheme for Cloud Computing in Vehicular Networks", Submitted to IEEE Transactions on Vehicular Technology
24. J. Fu, L. Yun, B. Bhargava, "Source-Location Privacy Protection based on Anonymity Cloud in Wireless Sensor Networks", Submitted to IEEE Transactions on Mobile Computing
25. S. Aneja, N. Aneja, M. Islam, B. Bhargava, "Fingerprint of IOT Devices Using Image Processing", Submitted to IEEE Transactions on Cloud Computing
26. N. Wang, J. Zeng, and B. Bhargava, Efficient Retrieval over Documents Encrypted by Attributes in Cloud Computing, Submitted to IEEE Transactions on Information Forensics & Security

Revised Submissions

27. J. Li, Y. Zhang, Y. Bai, S. Sha, B. Li and B. Bhargava, Memory De duplication for Virtual Machines in Clouds: A VMI-based Approach, Revised version Submitted to IEEE Transactions on Cloud Computing
28. R. Ranchal, P. Angin, B. Bhargava, A Self-Protecting Agents Based Model for High-Performance Mobile-Cloud Computing, Revised Version submitted to Computers and Security

Accepted

29. J. Fu, L. Yun, J. Jiang, B. Bhargava, "Secure Data Storage and Searching for Industrial IoT by Integrating Fog Computing and Cloud Computing", Accepted for publication in IEEE Transactions on Industrial Informatics (A special on Fog Computing for Industrial Applications submission). Preprint: Digital Object Identifier: 10.1109/TII.2018.2793350, (Online ISSN: 1941-0050), January, 2018
30. R. Ranchal, P. Angin, B. Bhargava, and L. Ben Othame, "EPICS: A Framework for Enforcing Security Policies in Composite Web Services" Accepted for Publication in IEEE Transactions on Services Computing, (To Appear), January 2018

31. M. Javed, E. Hamida, A. Al-Fuqaha and B. Bhargava, Adaptive Security for Internet of Vehicle of Smart Cities, IEEE Intelligent Transportation Systems Magazine, (To appear) August 2017.
32. N. Ahmed and B. Bhargava. From Byzantine Fault-Tolerance to Fault-Avoidance: An Architectural Transformation to Attack and Failure Resilience. Accepted for Publication in IEEE Transactions on Cloud Computing, TCC 2016.

Published

33. X. Wu, R. Jiang, B. Bhargava, "On the Security of Data Access Control for Multiauthority Cloud Storage Systems", *IEEE Transactions on Services Computing*, , No. 10, Vol. 2, pp. 258-272, 2017
34. A. Bijarano, A. Jindal, and B. Bhargava, "Measuring user's influence in the Yelp recommender system", PSU Research Journal Review, Vol. 1 Issue: 2, pp.91-104, 2017, <https://doi.org/10.1108/PRR-02-2017-0016>
35. R. Jiang, X. Wu, B. Bhargava, SDSS-MAC: Secure data sharing scheme in multi authority cloud storage systems, *Computers & Security* Vol. 62, pp 193–212, 2016
36. B. Bhargava, A. Johnson, G. Munyengabe, and P. Angin, A Systematic Approach for Attack Analysis and Mitigation in V2V Networks, *Journal of Wireless Mobile Networks, Ubiquitous Computing, and Dependable Applications (JoWUA)* Vol. 7, No. 1, pp. 79-96, 2016
37. R. Ranchal, A. Mohindra, J. Manweiler, B. Bhargava, RADical Strategies for Engineering Web-Scale Cloud Solutions. *IEEE Cloud Computing* 2(5): 20-29 (2015)
38. L. Othmane, R. Fernando, R. Ranchal, B. Bhargava, E. Bodden, Incorporating Attacker Capabilities in Risk Estimation and Mitigation, *Journal of Computers and Security*, Volume 51, pp. 41–61, June 2015
39. Y. Zhong, B. Bhargava, Y. Lu, P. Angin, A computational Dynamic Trust Model for User Authorization, *IEEE Transaction on Dependable and Secure Computing*, Vol. 12, No. 1, pp. 1-15, 2015
40. K. Xu, Y. Sun, B. Bhargava: An Introduction to the Enterprise-Participant (EP) Data Model. *International Journal of Next Generation Computing (IJNGC)*, Vol. 5, No. 3, pp. 304-317, 2014
41. L. Othmane, R. Fernando, R. Ranchal, B. Bhargava, E. Bodden, Likelihood of Threats to Connected Vehicles. *International Journal of Next Generation Computing (IJNGC)*, Vol. 5, No. 3, pp. 290-303, 2014
42. R. Jiang, B. Bhargava: Formal Theory for Security Protocol Analysis of Distributed Denial of Service. *International Journal of Next Generation Computing (IJNGC)*, Vol. 5, No. 3, pp. 233-248, 2014
43. A. Can, B. Bhargava: k-anonymity Chord for Anonymous Query Response. *International Journal of Next Generation Computing (IJNGC)*, Vol. 5, No. 3, pp. 274-289, 2014
44. L. Othmane, P. Angin, H., Weffers, B. Bhargava, Extending the Agile Development Approach to Develop Acceptable Secure Software, *IEEE Transaction on Dependable and Secure Computing* Vol.11, No. 6, pp 497-509, 2014
45. B. Panja, D. Morrison, P. Meharia, B. Bhargava, A. Prakash, Group Security of V2Vusing Cloud Computing Processing and 4G Wireless Services, *International Journal of Next Generation Computing (IJNGC)*, Vol. 5, No. 3, pp. 218-232, 2014

46. B. Bhargava, I Khalil, R. Sandhu, "Securing Big Data Applications in the Cloud", Guest Editors' Introduction, IEEE Cloud Computing 1(3): 24-26, 2014
47. H. Chen, B. Bhargava, Z. Fu, Multilabels-Based Scalable Access Control for Big Data Applications. IEEE Cloud Computing 1(3): 65-71, 2014
48. L. Lilien, L.B. Othmane, P. Angin, A. DeCarlo, R. Salih, B. Bhargava. , A Simulation Study of Ad Hoc Networking of UAVs with Opportunistic Resource Utilization Networks. Journal of Network and Computer Applications, Special Issue on Advanced Technologies for Homeland Defense and Security, Vol. 38, pp. 3-15, 2014.
49. B. Panja, B. Bhargava, S. Pati, D. Paul, L. Lilien, P. Meharia, Monitoring and Managing Cloud Computing Security using Denial of Service Bandwidth Allowance, Recent Patents on Computer Science, Vol. 6, No. 1, pp. 73-81, 2013.
50. H. Kim, R. Oliveira, B. Bhargava, J. Song, A Novel Robust Routing Scheme against Rushing Attacks in Wireless Ad Hoc Networks, Wireless Personal Communications , Volume 70, Issue 4, pp 1339-1351, ISSN: 0929-6212, 2013.
51. L.B. Othmane, H. Weffers, P. Angin, B. Bhargava , A Time-Evolution Model for the Privacy Degree of Information Disseminated in Online Social Networks, International Journal of Communication Networks and Distributed Systems, Vol. 11, No. 4, pp. 412-430, 2013.
52. T. Gong, B. Bhargava, "Immunizing mobile ad hoc networks against collaborative attacks using cooperative immune model", Security and Communication Networks Vol. 6: pp. 58-68, 2013.
53. P. Angin, B. Bhargava, "A Confidence Ranked Co-occurrence Approach for Accurate Object Recognition in Highly Complex Scenes" Journal of Internet Technology, Vol. 14, No. 1, pp. 13-19, 2013.
54. P. Angin and B. Bhargava, "An Agent-based Optimization Framework for Mobile-Cloud Computing" Journal of Wireless Mobile Networks, Ubiquitous Computing, and Dependable Applications (JoWUA) Vol. 4, No. 2, pp. 1-17, 2013.
55. L. Yao, T.Gong, J. Fan, B. Bhargava, Research on ARM9-Based Intelligent Immune System for Avoiding Rear-End Collision, International Journal of Immune Computation (IC) Vol. 1, No. 1, pp. 4-8, 2013
56. A. Can, B. Bhargava: SORT: A Self-ORganizing Trust Model for Peer-to-Peer Systems. IEEE Trans. Dependable and Secure Computing. 10(1): 14-27, 2013
57. T. Shon, A. Vasilakos, B. Bhargava, I. Stojmenovic, H. Jin, A. Zomaya: Editorial for Special Issue on "New Technologies and Applications for Wireless Communications & Mobile Cloud Computing". MONET 18(1): 98-102, 2013
58. K. Kumar, J. Liu, Y Lu, B. Bhargava, A Survey of Computation Offloading for Mobile Systems, ACM Springer Mobile Networks and Applications (*MONET*) Journal, special issue on ACM Mobile computing, Vol. 18, No. 1, 129-140, Feb. 2013
59. B. Bhargava, P. Angin, R. Ranchal, R. Sivakumar, A. Sinclair, M. Linderman A Trust based approach for Secure Data Dissemination in Mobile Peer to Peer Network of AVs, International Journal of Next Generation Computing, Vol 3, No. 1, 2012
60. N. Idika, B. Bhargava. Extending Attack Graph-Based Security Metrics and Aggregating Their Application. IEEE Transaction on Dependable and Secure Computing 9(1): 75-85 2012

61. R. Jiang, M. Azarmi, T. Gong, B. Bhargava. Novel Secure and Dynamic Clustering Protocols in Wireless Sensor Networks. Elsevier Computers & Security, 2011
62. P. Angin, B. Bhargava. Real-time Mobile-Cloud Computing for Context-Aware Blind Navigation. International Journal of Next Generation Computing, Vol 2, No 2, 2011
63. Y. Zhang and B. Bhargava. Allocation schemes, Architectures, and Policies for Collaborative Port Scanning Attack. Journal of Emerging Technologies in Web Intelligence, Vol 3, No 2, 154-167, May 2011 doi:10.4304/jetwi.3.2.154-167, 2011
64. A. Shirsat and B. Bhargava. Local geometric algorithm for whole boundary. Security and Communication Networks, Wiley Online Library. DOI: 10.1002/sec.271; 3:1–10, 2010
65. Y. Lu and B. Bhargava. "SAGA: Self-Adjusting Congestion Avoidance Routing Protocol for Ad Hoc Networks", In International Journal of Next-Generation Computing (IJNGC), Vol. 1, No 1, 124-144, 2010
66. L. Lilien, A. Bhargava, and B. Bhargava, "A Road from Fraud Vulnerabilities and Threats to Fraud Avoidance and Tolerance", IPSI internal Journal on Emerging Technologies, 2009
67. B. Bhargava, Y. Zhang, N. Idika, L. Lilien, M. Azarmi, "Collaborative Attacks in WiMAX Networks", Wiley Journal on Security and Communication Networks, 2(5): 373-391, 2009
68. Y. Zhang and B. Bhargava, Self-Learning Disk Scheduling, IEEE Transactions on Knowledge and Data Engineering, Vol. 21, No. 1, 50-65, 2009
69. S. Mohanty and B. Bhargava, Invisible Watermarking Based on Creation and Robust Insertion-Extraction of Image Adaptive Watermarks, ACM Transaction on Multimedia Computing, Communication and Applications (ACM TOMCCAP), Vol. 5, No. 2, 1-24, 2008
70. W. Wang, J. Kong, B. Bhargava, and M. Gerla, Visualisation of Wormholes in Underwater Sensor Networks: A Distributed Approach, Int. Journal of Security and Networks, Vol. 3, No. 1, 10-23, 2008
71. B. Panja, S. Madria, B. Bhargava, "Energy and Communication Efficient Group Key Management Protocol for Hierarchical Sensor Networks", International Journal of Distributed Sensor Networks, Vol. 3, No. 2, 201-223, 2007
72. B. Panja, S. Madria, B. Bhargava: A Role-based Access in a Hierarchical Sensor Network Architecture to provide Multilevel Security. Computer Communications 31(4): 793-806 (2008)
73. M. Jenamani, Y. Zhong, and B. Bhargava. "Cheating in Online Auction: Towards Explaining the Popularity of English Auction," Journal of Electronic Commerce Research and Applications (ECRA), Vol. 6, No. 1, pp. 53-62, 2007.
74. S. Li, G. Chen, A. Cheung, B. Bhargava, "On the Design of Perceptual MPEG-Video Encryption Algorithms", in IEEE Transactions on Circuits and System for Video Technology, Vol. 17, No. 2, pp 214-223, 2007
75. Y. Lu, W. Wang, D. Xu, and B. Bhargava. "Trust based Privacy Preservation in Peer to Peer Data Sharing," IEEE Transaction on Systems Man and Cybernetics (Special issues based on best papers in Secure Knowledge Management Conference), Vol. 36, No. 3, pp. 498-502, 2006
76. L. Lilien and B. Bhargava. "A Scheme for Privacy Preserving Data Dissemination," IEEE Transaction on Systems Man and Cybernetics (Special issues based on best papers in Secure Knowledge Management Conference), Vol. 36, No.3, pp. 502-506, 2006

77. G. Ding, Z Sahinoglu, P Orlik, J Zhang, and B Bhargava, "Tree-Based Data Broadcast in IEEE 802.15.4 and ZigBee Networks" *IEEE Transactions on Mobile Computing*, 5(11):1561-1574, November, 2006.
78. W. Wang, B. Bhargava, Y. Lu, and X. Wu. "Defending against Wormhole Attacks in Mobile Ad Hoc Networks", *Wiley Journal on Wireless Communications and Mobile Computing*, pp. 483-503, 2006.
79. X. Wu, B. Mukherjee, and B. Bhargava. "A Crossing-tier Location Update/Paging Scheme in Hierarchical Cellular Networks," *IEEE Transactions on Wireless Communications* , Vol. 4, No. 5, pp. 839-848, 2006.
80. G. Ding, X Wu, and B. Bhargava "Performance Evaluation of Multi-Rate Mobile Ad Hoc Networks" *International Journal of Performance Evaluation*, 63 (11): 1110-1126, 2006
81. B. Bhargava, M. Jenamani, and Y. Zhong, "Counteracting Shill Bidding in online English Auction", *International Journal of Cooperative Information Systems*, Vol. 14, pp. 245-263, 2005
82. M. Hefeeda, A. Habib, D. Xu, B. Bhargava, and B. Botev. "CollectCast: A Peer-to-Peer Service for Media Streaming," *ACM/Springer Multimedia Systems Journal*, Vol. 11(1) pp. 68-81 (2005)
83. A. Habib, D. Xu, M. Atallah, and B. Bhargava. "A Tree-Based Forward Digest Protocol to Verify Data Integrity in Distributed Media Streaming," *IEEE Transactions on Knowledge & Data Engineering (TKDE)*, Vol. 17(7), pp.1010-1014, July 2005.
84. X. Wu and B. Bhargava. "AO2P: Ad hoc On-demand Position-based Private Routing Protocol," *IEEE Transactions on Mobile Computing*, 4(4), pp. 335-348, July, 2005.
85. B. Bhargava, S. Wang, M. Khan, and A. Habib. "Multimedia Data Transmission and Control using Active Networks," *Journal of Computer Communications (Special Issue on Activated and Programmable Internet)*, 28(6):623-639, 2005.
86. A. Habib, S. Fahmy, and B. Bhargava. "On Monitoring and Controlling QoS Network Domains," *ACM/Wiley International Journal of Network Management*, (15)1, January-February, 2005.
87. B. Bhargava, L. Lilien, A. Rosenthal, and M. Winslett. "Pervasive Trust," *IEEE Intelligent Systems*, Vol. 19, No. 5, pp. 74-78, September/October 2004.
88. X. Wu, G.-H. Gary Chan, B. Mukherjee, and B. Bhargava. "Mobile-assisted Data Forwarding for Wireless Networks," *Journal of Communications and Networks*, Vol. 6, No. 3, pp. 216-225, September 2004.
89. B. Bhargava, X. Wu, Y. Lu, and W. Wang. "Integrating Heterogeneous Wireless Technologies: A Cellular Aided Mobile Ad Hoc Network (CAMA)," in *Kluwer Mobile Network and Applications (MONET), Special Issue on Integration of Heterogeneous Wireless Technologies*, Vol. 9, pp. 393-408, 2004.
91. B. Bhargava, C. Shi, and S. Wang. "MPEG Video Encryption Algorithms," *Multimedia Tools and Applications*, Vol 24, No. 3, 57-79, April, 2004.
92. M. Hefeeda, B. Bhargava, and D. Yau. "A Cost-Effective Architecture for On-Demand Media Streaming," *Journal of Computer Networks*, Vol. 44, Issue 3, pp. 353-382, March 2004.

93. A. Habib, M. Khan, and B. Bhargava. "Edge-to-Edge Measurement-based Distributed Network Monitoring," *Computer Networks*, Vol. 44, Issue 2, pp. 211-233, February 2004.
94. X. Wu, B. Mukherjee, G.-H. Chan, and B. Bhargava. "Assuring Communications by Balancing Load in Cellular Networks," *IEICE Transaction on Communications, IEICE/IEEE Joint Special Issue on Assurance Systems and Networks*, Vol. E86-B, No. 10, pp. 2912-2921, October 2003.
95. Y. Lu, B. Bhargava, W. Wang, Y. Zhong, and X. Wu. "Secure Wireless Network with Movable Base Stations," *IEICE Transaction on Communications, IEICE/IEEE Joint Special Issue on Assurance Systems and Networks*, Vol. E86-B, No. 10, pp. 2922-2930, October 2003.
96. A. Habib, S. Fahmy, S. Avasarada, V. Prabhakar, and B. Bhargava. "On Detecting Service Violations and Bandwidth Theft in QoS Network Domains," *Computer Communications*, Vol. 26, Issue 8, May 2003, pp. 861-871.
97. S. Madria, M. Tubaishat, and B. Bhargava. "Performance Evaluation of Linear Hash Structures in a Nested Transaction Environment," *Journal of Systems and Software*, Vol. 63, No. 3, May 2002, pp. 59-79.
98. D. Yau and B. Bhargava. "Heterogeneous CPU Services Using Differentiated Admission Control," *Journal of Multimedia Tools and Applications*, Special issue on QoS in Multimedia Networks, Vol. 17, July 2002, pp. 213-232.
99. S. Madria, M. Mohania, B. Bhargava, and S. Bhowmick. "Mobile Data and Transactions," *Information Science Journal*, Vol. 141, No. 3-4, April 2002, pp. 279-309.
100. B. Bhargava. "A study of Communication Delays for Web Transactions," *Cluster Computing Journal*, 4(4), 2001, pp. 319-333.
101. S. Madria, S. Maheshwari, B. Chandra, and B. Bhargava. "Crash Recovery in an Open and Safe Nested Transaction Model: Formalization and Correctness," *International Journal of Cooperative Information Systems*, Vol. 10(1-2): 2001, pp. 1-50.
102. S. Madria and B. Bhargava. "A Transaction Model for Improving Data Availability in Mobile Computing," *Distributed and Parallel Databases: An International Journal*, 2001, pp. 127-160.
103. A. Zhang, M. Nodine, and B. Bhargava. "On Semi-Atomicity for Flexible Transactions in Distributed Database Systems," *IEEE Transactions on Knowledge and Database Engineering*, Vol. 13, No. 3, 2001, pp. 426-439.
104. S. Madria, S. Goel, and B. Bhargava. "Adaptive Constrained Locking Protocol for High Data Contention Environments: Correctness and Performance," *Information and Software Technology Journal*, Vol. 42(9), 2001, pp. 599-608
105. S. Madria, T. Malik, and B. Bhargava. "Multilevel Transactions and Semantic Concurrency Control in Linear Hash Structure Environment," *Information and Software Technology Journal*, Vol. 42(7), 2000, pp. 445-464.
106. S. Madria, M. Mohania, and B. Bhargava. "Guest Editorial: World Wide Web Data Management," *WWW Journal*, Vol. 3, No. 2, 2000, pp. 1-3.
107. S. Madria, S. Maheshwari, B. Chandra, and B. Bhargava. "An Open and Safe Nested Transaction Model: Concurrency and Recovery," *Journal of Systems Software*, 55 (2) 2000, pp. 151-165.

108. B. Ramamurthy, S. Upadhyaya, and B. Bhargava. "Design and Analysis of an Integrated Check Pointing and Recovery Scheme for Distributed Applications," *IEEE Transactions on Knowledge and Data Engineering*, Vol. 12, .2, April 2000, pp.174-186.
109. S. Goel, B. Bhargava, and S. Madria. "Adaptive Constrained Locking Protocol for High Data Contention Environments," *Information and Software Technology*, Vol. 42, Issue 9, June 2000, pp. 612-635.
110. B. Bhargava. "Guest Editorial: Digital Libraries and Multimedia," *International Journal of Multi-media Systems*," Vol. 10, January 2000, pp. 107-112.
111. B. Bhargava and M. Annamalai. "A Framework for Communication Software and Measurements for Digital Libraries," *International Journal of Multi-media Systems*, Vol. 10, January 2000, pp. 205-235.
112. E. Pitoura and B. Bhargava. "Data Consistency in Intermittently Connected Distributed Systems," *IEEE Transactions on Knowledge and Database Engineering*, Vol. 11, No. 6, December 1999, pp. 896-915.
113. B. Bhargava. "Concurrency Control in Distributed Database Systems," in *IEEE Transactions on Knowledge and Data Engineering*, Vol. 11, No. 1, January 1999, pp. 3-17.
114. B. Bhargava and S. Goel. "Object Request Based Clustering for Method Processing in Object-Oriented Database System," *Journal of Integrated Design and Process Science*, Vol. 2, No. 2, June 1998, pp. 62-77.
115. E. Pitoura, A. Zhang, and B. Bhargava. "On Relaxing Serializability By Constraining Transaction Readsets," *Information Systems*, Vol. 22, No. 6, 1997, pp. 387-400.
116. M. Kang, H. Dietz, and B. Bhargava. "Dependence Analysis for Detection of Database Query Parallelism," *International Journal of Knowledge and Database Systems*, Vol. 14, 1994, pp. 57-75.
117. B. Bhargava, Y. Jiang, and S. Srinivasan. "Performance Study of Supporting Objects in the O-Raid Distributed Database System," *International Journal of Intelligent and Cooperative Information Systems*, Vol. 2, No. 2, 1993, pp. 225-247.
118. B. Bhargava, E. Mafla, and J. Riedl. "Experimental Facility for Kernel Extensions to Support Distributed Database Systems," *International Journal of System Integration*, Vol. 3, 1993, pp. 5-21.
119. D. Veeramani, B. Bhargava, and M.M. Barash. "Information System Architecture for Heterarchical Control of Large Flexible Manufacturing Systems," *International Journal of Computer-Integrated Manufacturing Systems*, Vol. 6, No. 2, 1993, pp. 76-93.
120. B. Bhargava and Y. Jiang. "Parallelism and Non-Parallelism in Raid Distributed Database System," *Journal of Computer and Software Engineering*, No. 3, 1993, pp. 173-194.
121. D. Rine and B. Bhargava. "Object-Oriented Computing," *IEEE Computer*, Vol. 25, No. 10, 1992, pp. 6-10.
122. B. Bhargava, Y. Zhang, and E. Mafla. "Evolution of a Communication System for Distributed Transaction Processing in Raid," *Journal Computing Systems*, Vol. 4, No. 3, 1991, pp. 277-314.

123. E. Mafla and B. Bhargava. "Communication Facilities for Distributed Transaction Processing Systems," Special Issue (On Distributed Computing Systems) of the *IEEE Computer*, Vol. 24, No. 8, 1991, pp. 61-66.
124. B. Bhargava, A. Helal, and K. Friesen. "Analyzing Availability of Fault-Tolerant Distributed Database Systems," *International Journal in Computer Simulation*, Vol. 1, No. 4, 1991, pp. 393-418.
125. B. Bhargava, E. Mafla, and J. Riedl. "Communication in the Raid Distributed Database System," *International Journal on Computers and ISDN Systems*, 21, 1991, pp. 81-92.
126. B. Bhargava and J. Riedl. "A Formal Model for Adaptable Systems for Transaction Processing," *IEEE Transactions on Knowledge and Data Engineering*, Vol. 4, No. 1, 1989, pp. 433-449.
127. B. Bhargava and J. Riedl. "RAID Distributed Database System," *IEEE Transactions on Software Engineering*, Vol. 15, No. 6, 1989, pp. 726-736.
128. B. Bhargava. "Design Principles in Experimental Distributed Systems," *IEEE Transactions on Software Engineering*, (Guest Editorial), Vol. 15, No. 6, 1989, pp. 661-662.
129. B. Bhargava and P. Ng. "A Dynamic Majority Determination Algorithm for Reconfiguration of Network Partitions," in *International Journal of Information Science*, Vol. 46, No. 3, 1988, pp. 27-45.
130. P. Leu and B. Bhargava. "Clarification of Two Phase Locking in Concurrent Transaction Processing," *IEEE Transactions on Software Engineering*, SE-14, No. 1, 1988, pp. 120-123.
131. B. Bhargava. "Transaction Processing and Consistency Control of Replicated Copies during Failures," *Journal of Management Information Systems*, Vol. 4, No. 2, 1987, pp. 93-112.
132. B. Bhargava and L. Lilien. "Enforcement of Data Consistency in Database Systems," *SADHANA*, Vol. 1 and 2, 1987, pp. 1149-1180, in *Proceedings of Indian Academy of Science*, (special issue on Reliability and Safety Issues in Real-time Systems).
133. P. Leu and B. Bhargava. "Multidimensional Timestamp Protocols for Concurrency Control," *IEEE Transactions on Software Engineering*, SE-13, No. 12, 1987, pp. 1238-1253.
134. L. Lilien and B. Bhargava. "Database Integrity Block Construct: Concepts and Design Issues," *IEEE Transactions on Software Engineering*, SE-11, No. 9, 1985, pp. 865-885.
135. L. Lilien and B. Bhargava. "A Scheme for Verification of Database Integrity," *IEEE Transactions on Software Engineering*, SE-10, No. 11, 1984, pp. 664-680.
136. B. Bhargava. "Performance Evaluation of Reliability Control Algorithms for Distributed Database Systems," *Journal of Systems and Software*, 3, 1984, pp. 39-264.
137. B. Bhargava. "Resilient Concurrency Control in Distributed Database Systems," *IEEE Transactions on Reliability*, Vol. R-31, No. 5, 1984, pp. 437-443.
138. B. Bhargava. "A Non Coded Computerized Micro-biology System," *Journal of Laboratory Medicine*, Vol. 15, No. 5, 1984, pp. 334-337.
139. B. Bhargava and C. Hua. "A Causal Model for Analyzing Distributed Concurrency Control Algorithms," *IEEE Transactions on Software Engineering*, SE-9, 1983, pp. 470-486.

140. B. Bhargava. "Reliability Issues in Distributed Systems," *IEEE Transactions on Software Engineering*, SE-8, 1982, pp.165-166. (Guest Editorial).
141. B. Bhargava and L. Lilien. "On Optimal Placement of Integrity Assertions in a Transaction Processing System," *International Journal of Computer and Information Science*, Vol. 10, No. 5, 1981, pp. 315-330.
142. B. Bhargava and C. Hua. "Cost Analysis of Recovery Block Scheme and Selection Criterion for Alternates," *International Journal of Computer and Information Science*, Vol. 10, No. 5, 1981, pp. 359-382.
143. C. McDonald, R. Murray, D. Jeris, B. Bhargava, J. Seeger, and L. Blevins. "A Computer Record and Clinical Monitoring System for Ambulatory Care," *American Journal of Public Health*, Vol. 67, No. 3, 1977, pp. 240-245.
144. B. Bhargava, C. McDonald, H. Rivera, L. McCarthy, and L. Blevins. "Development and Implementation of a Computerized Clinical Laboratory System," *Journal of Laboratory Medicine*, Vol. 7, No. 12, 1976, pp. 28-37.
145. K. Fu and B. Bhargava. "Tree Systems for Syntactic Pattern Recognition," *IEEE Transactions on Computers*, C-22, No. 12, 1973, pp. 1087-1099.

5. Refereed Conference Proceedings

146. R. Fernando, B. Bhargava, R Ranchal, P. Angin. A Monitoring Approach For Policy Enforcement In Cloud Services, Proceedings of IEEE Cloud Conference, Honolulu, June, 2017 (14% acceptance IEEE Cloud conference)
147. R. Ranchal, S Singh, P. Angin, A. Mohindra, H. Lei, B. Bhargava, Raas And Hierarchical Aggregation Revisited, Proceedings of IEEE Cloud Conference, Honolulu, June, 2017
148. M. Villarreal-Vasquez, B. Bhargava, P. Angin, Adaptable Safety And Security In V2X Systems, Proceedings of IEEE Internet of Things (IoT) Conference, Honolulu, June, 2017
149. S. Kumar, B. Bhargava, R. Macêdo, G. Mani, Securing IoT -Based Cyber Physical Human Systems Against Collaborative Attacks, Proceedings of IEEE Internet of Things (IoT) Conference, Honolulu, June, 2017
150. M. Azarmi and B. Bhargava, An End-to-End Dynamic Trust Framework for Service-Oriented Architecture, Proceedings of IEEE Cloud Conference, Honolulu, June 2017
151. M. Azarmi and B. Bhargava, End -To -End Policy Monitoring And Enforcement For Service -Oriented Architecture, Proceedings of IEEE Cloud Conference, Honolulu, June 2017
152. M. Villarreal-Vasquez, B. Bhargava, N. Ahmed, P. Angin, D. Goodwin, J. Kobes, K. Brin, An MTD-based Self-Adaptive Resilience Approach for Cloud Systems, Proceedings of IEEE Cloud Conference, Honolulu, June 2017
153. D. Ulybyshev, B. Bhargava, D. Steiner, L. Li, J. Kobes, H. Halpin, M. Villarreal – Vasquez, A. Alsalem, R. Ranchal, Privacy – Preserving Data Dissemination in Untrusted Cloud, Proceedings of IEEE Cloud Conference, Honolulu, June 2017
154. R. Ranchal, B. Bhargava, R. Fernando, Z. Jin and H. Lei, Privacy Preserving Access Control in Service-Oriented Architecture, Proceedings of IEEE CLOUD Conference, San Francisco, June. 2016.

155. R. Fernando, R. Ranchal, B. An, L. Ben Othmane, B. Bhargava, Consumer Oriented Privacy Preserving Access Control for Electronic Health Records in the Cloud, Proceedings of IEEE CLOUD conference, San Francisco, June. 2016.
156. N. Ahmed, B. Bhargava: Mayflies: A Moving Target Defense Framework for Distributed Systems. Proceedings of ACM Conference on Computers and Communications Security (CCS) workshop on Moving Target Defense: 59-64, Vienna, October, 2016
157. N. Ahmed and B. Bhargava, Disruption-Resilient Publish and Subscribe, 6th International Conference on Cloud Computing and Services Science, Rome, April 2016 (Best paper award)
158. P. Angin, B. Bhargava, and R. Ranchal, Temper Resistance Autonomous Agent-based Mobile Computing, Proceedings of IEEE/IFIP Network Operations and Management Symposium (NOMS 2016), Istanbul, Turkey, April, 2016
159. L. Lilien, L. Othmane, P. Angin, B. Bhargava, R. Salih, A. DeCarlo, Impact of Initial Target Position on Performance of UAV Surveillance Using Opportunistic Resource Utilization Networks, Proceedings of 34th IEEE Symposium on Reliable Distributed Systems (SRDS) 2015
160. C. Qu, D. Ulybyshev, B. Bhargava, L. Lilien, Secure Dissemination of Video Data in Vehicle-to-Vehicle Systems, Proceedings of 34th IEEE Symposium on Reliable Distributed Systems (SRDS) 2015
161. B. Bhargava, P. Angin, R. Ranchal, Sunil Lingayat, "A Distributed Monitoring and Reconfiguration Approach for Adaptive Network Computing", Proceedings of 34th IEEE Symposium on Reliable Distributed Systems (SRDS) (Best paper award)
162. P. Angin and B. Bhargava, "A Self-Cloning Agents Based Model for High-Performance Mobile-Cloud Computing", 8th IEEE International Conference on Cloud Computing (IEEE CLOUD 2015), New York, June, 2015
163. A. Mohindra, R. Ranchal, N. Zhou, S. Kapoor, B. Bhargava, "Hierarchical Aggregation of Consumer Ratings for Service Ecosystem", 22nd IEEE International Conference on Web Services (IEEE ICWS 2015), New York, June 2015.
164. N. Ahmed, B. Bhargava. "Towards Targeted Anomaly Detection Deployments in Cloud Computing". IEEE International Conference on Cloud Computing and Services Science. Lisbon, Portugal, May 2015.
165. N. Ahmed, B. Bhargava. "Towards Dynamic QoS Monitoring in Service Oriented Architectures", IEEE International Conference on Cloud Computing and Services Science. Lisbon, Portugal, May 2015.
166. L Othmane, P. Angin, B. Bhargava: Using Assurance Cases to Develop Iteratively Security Features Using Scrum, in Proceedings of Ninth IEEE International Conference on Availability, Reliability and Security (ARES), pp. 490-497, Fribourg, Switzerland, 2014
167. A. Miles, Y. Bai, D. Chinn, and B. Bhargava, "An Experimental Study of Hybrid Energy-Aware Scheduling in a Cloud Testbed", in the Proceedings of the 6th Global Information Infrastructure and Networking Symposium, Montreal, Canada, September 2014
168. L. Othmane, H. Weffers, R. Ranchal, P. Angin, B. Bhargava and M. Mohamad, A Case for Societal Digital Security Culture, 28th IFIP International Information and Security and Privacy conference (SEC), Auckland, July 2013

169. N. Arajo, R. Oliveira, A. Shinoda, B. Bhargava., Kappa Fuzzy ARTMAP: A Feature Selection Based Methodology to Intrusion Detection in Computer Networks , In Proceedings of IEEE International Conference on Trust, Security, and Privacy, in computing and Communications, (TrustCom), Melbourne, pp. 271-276, July 2013
170. N. Ahmed, M. Linderman, R. Gamble and B. Bhargava, Analysis of end to end SOA security protocols with mobile devices, IEEE MDM conference and workshop, Milan, June, 2013
171. R. Ranchal, B. Bhargava Protecting PLM Data throughout their lifecycle. In Proceedings of QSHINE 2013, New Delhi, India, January, 2013
172. B. Bhargava, R. Ranchal, L. B. Othmane., Secure Information Sharing in Digital Supply Chains. In Proceedings of IEEE IACC 2013, New Delhi, India, February, 2013
173. R. Fernando, B. Bhargava, M. Linderman, "Private Anonymous Messaging",IEEE International Symposium on Reliable Distributed Systems (SRDS), 2012
174. M. Azarmi, B. Bhargava, P. Angin, R. Ranchal, N. Ahmed, A. Sinclair, M. Linderman, L.B. Othmane, "An End-to-End Security Auditing Approach for Service Oriented Architectures" IEEE International Symposium on Reliable Distributed Systems (SRDS), 2012.
175. N. Arajo, R. Oliveira, E. Ferreira, V Nascimento, A. Akira, B. Bhargava., Performance Evaluation of the Fuzzy ARTMAP for Network Intrusion Detection. Chennai, International Conference on Security in Computer Networks and Distributed Systems (SNDS), pp 23-34, India 2012.
176. S. Dhurandher, I. Woungang, A. Gupta, B. Bhargava, E2SIW: An Energy Efficient Scheme Immune to Wormhole Attacks in Wireless Ad Hoc Networks, 26th IEEE International Conference on Advanced Information Networking and Applications (AINA-2012), Fukuoka, Japan, March, 2012
177. B. Bhargava, P. Angin, L. Duan. A Mobile-Cloud Pedestrian Crossing Guide for the Blind. In Proceedings of International Conference on Advances in Computing & Communication, 2011
178. N. Idika, B. Bhargava. A Kolmogorov Complexity Approach for Measuring Attack Path Complexity, in Proceedings of IFIP International Information Security (SEC 2011) conference, June 2011, Lucerne, Switzerland
179. B. Bhargava, P. Angin, L. Duan. A Mobile-Cloud Pedestrian Crossing Guide for the Blind, In Proceedings of International Conference on Advances in Computing and Communication ICACC-11, April, 2011, India
180. P. Guturu, B. Bhargava. Cyber-Physical Systems: A confluence of Cutting Edge Technology Streams, In Proceedings of International Conference on Advances in Computing and Communication ICACC-11, April, 2011, India
181. B. Bhargava, N. Singh, A. Sinclair. Privacy in Cloud Computing Through Identity Management, In Proceedings of International Conference on Advances in Computing and Communication ICACC-11, April, 2011, India
182. S. K. Dhurandher, I. Woungang, A. Gupta, B. K. Bhargava. E2SIW: An Energy Efficient Scheme Immune to Wormhole Attacks in Wireless Ad Hoc Networks. In Proceedings of the 26th IEEE International Conference on Advanced Information Networking and Applications (AINA-2012), Fukuoka, Japan, March 26-29, 2012

183. N. C. Idika, B. H. Marshall, B. K. Bhargava. Maximizing network security given a limited budget. Richard Tapia Celebration of Diversity in Computing Conference 2009: 12-17
184. N. Araújo, R. Oliveira, E. Ferreira, A. A. Shinoda, B. Bhargava, "Identifying Important Characteristics in the KDD99 Intrusion Detection Dataset by Feature Selection using a Hybrid Approach," In proceedings of the 17th IEEE International Conference on Telecommunications – ICT 2010, Doha, Qatar, 2010
185. P. Angin, B. Bhargava, S. Helal. A Mobile Cloud Collaborative Traffic Lights Detector for Blind Navigation. 1st MDM International Workshop on Mobile Cloud. 2010
186. P. Angin, B. Bhargava, R. Ranchal, N. Singh, L. Lilien, L. Othmane, M. Linderman. A User-Centric Approach for Privacy and Identity Management in Cloud Computing, in Proceedings of 29th IEEE Symposium on Reliable Distributed System (SRDS), Nov 2010
187. R. Ranchal, B. Bhargava, L. Othmane, L. Lilien, A. Kim, M. Kang, M. Linderman. Protection of Identity Information in Cloud Computing without Trusted Third Party, in Proceedings of Third International Workshop on Dependable Network Computing and Mobile Systems (DNCMS 2010) in conjunction with 29th IEEE Symposium on Reliable Distributed System (SRDS), Oct 2010
188. P. Angin, B. Bhargava, S. Helal. A Mobile-Cloud Collaborative Approach for Context-Aware Blind Navigation. Grace Hopper Celebration of Women in Computing, 2010
189. A. Burak Can and Bharat Bhargava. Anonymous access to trust information using k-anonymity chord. In Proceedings of the Second International Conference on Advances in P2P Systems (AP2PS), 2010
190. E. Ferreira, R. Olivier, G. Carrijo, B. Bhargava, "Intrusion Detection in Wireless Mesh Networks Using a Hybrid Approach", IEEE International Conference on Distributed Computing Systems workshop SAHN, May, 2009, Montreal
191. B. Bhargava, R. Olivier, Y. Zhang, N. Idika, "Addressing Collaborative Attacks and Defense in Ad Hoc Wireless Networks", IEEE International Conference on Distributed Computing Systems workshop SAHN, May, 2009, Montreal
192. W. Wang, B. Bhargava, "Defending against Collaborative Packet Drop Attacks on MANET", in Proceedings of IEEE Symposium on Reliable Distributed System (SRDS) workshop on Dependable Network Computing and Mobile Systems, Sept., 2009, Buffalo, NY
193. R. Olivier, B. Bhargava, M Azarmi, W. Ferreira, W. Wang, and M. Lindermann, "Developing Attack Defense Ideas for Ad Hoc Wireless Networks" in Proceedings of IEEE Symposium on Reliable Distributed System (SRDS) workshop on Dependable Network Computing and Mobile Systems, Sept., 2009, Buffalo, NY
194. W. Wang, Z. Li, R Owens, B. Bhargava, "Secure and Efficient Access to Outsourced Data", ACM Cloud Computing Security workshop, CCSW2009 in conjunction with the 16th ACM Conference on Computer and Communications Security (CCS) , November 2009, Chicago, IL
195. Y. Bai, X. Su, B. Bhargava, Detection and Filtering Spam over Internet Telephony: A User-behavior-aware Intermediate-network-based Approach, International Conference on Multimedia and Expo, July, 2009, Mexico
196. Y. Bai, X. Su, B. Bhargava, Adaptive Voice Spam Control With User Behavior, 11th IEEE International Conference on High Performance Computing and Communications, HPCC-09, June 2009, Korea.

197. N. Idika, B. Marshall, and B. Bhargava "Maximizing Network Security Given a Limited Budget," Tapia '09, April 2009.
198. P. Hurni, T. Braun, B. Bhargava, and Y. Zhang, Multi-Hop Cross-Layer Design in Wireless Sensor Networks: A Case Study, 4th IEEE International Conference on Wireless and Mobile Computing: Networking and Communications (WiMob 2008), Avignon, France, Oct. 2008
199. C. Liu, X. Zhang, J. Han, Y. Zhang, B. Bhargava, Noncrashing Failures Indexing: A Dynamic Program Slicing-based Approach, International Symposium on Software Testing and Analysis, London, 2007
200. B. Bhargava "Innovative Ideas in Privacy Research (Keynote Talk)" in Proceedings of Dexa workshops and conference, pp. 677-681, 2006
201. B. Panja, S. Madria, B. Bhargava "Energy and Communication Efficient Group Key Management Protocol for Hierarchical Sensor Networks", in Proceedings of IEEE International Conference on Sensor Networks, Ubiquitous, and Trustworthy Computing. (SUTC), pp 384-393, 2006.
202. J. Kong, Z. Ji, W. Wang, M. Gerla, R. Bagrodia, and B. Bhargava, Low-cost Attacks against Packet Delivery, Localization and Time Synchronization Services in Under-Water Sensor Networks in Proceedings of ACM Workshop on Wireless Security (WiSe), in conjunction with MobiCom, 2005.
203. W. Wang and B. Bhargava. "Key Distribution and Update for Secure Inter-group Multicast Communication" in Proceedings of ACM Workshop on Security of Ad Hoc and Sensor Networks (SASN), in conjunction with ACM CCS, pp. 43-52, 2005.
204. A. Kumar, A. Bhargava, B. Bhargava, S. Madria, "Adaptable Web Browsing of Images in Mobile Computing Environment: Experiments and Observations", Proceedings of ICDCIT, pp 314-320, 2005
205. J. Kong, Z. Ji, W. Wang, M. Gerla, R. Bagrodia, and B. Bhargava, "Low-cost Attacks against Packet Delivery, Localization and Time Synchronization Services in Under-Water Sensor Networks" in Proceedings of ACM Workshop on Wireless Security (WiSe), in conjunction with MobiCom, 2005
206. G. Ding, Z. Sahinoglu, B. Bhargava, P. Orlik, and J. Zhang. "Reliable Broadcast in ZigBee Networks, in Proceedings of Second Annual International Conference on Sensors and Ad hoc Communication and Networks", Sept, 2005.
207. A. Habib, D. Xu, M. Atallah, B. Bhargava. "Verifying Data Integrity in Peer to Peer Video Streaming," in Proceedings of Multimedia SPIE/ACM Twelve Conference on Computing and Network (MMCN), January 2005.
208. Y. Zhong and B. Bhargava. "Using Entropy to Trade Privacy for Trust," in Proceedings of NSA/AFRL Workshop on Secure Knowledge Management (SKM'04), NY, September, 2004.
209. Y. Lu, W. Wang, D. Xu, and B. Bhargava. "Trust-Based Privacy Preservation for Peer-to-peer Media Streaming," in Proceedings of NSF/NSA/AFRL Workshop on Secure Knowledge Management (SKM'04), NY, September, 2004.
210. W. Wang and B. Bhargava. "Visualization of Wormholes in Sensor Networks, in Proceedings of ACM Workshop on Wireless Security (WiSe), October 2004.

211. M. Jenamani, L. Lilien, and B. Bhargava. "Anonymizing Web Services Through a Club Mechanism with Economic Incentives," in Proceedings International Conference on Web Services (ICWS'04), pp. 792-795, CA, July 2004.
212. B. Bhargava and L. Lilien. "Private and Trusted Collaborations," in Proceedings of NSF/NSA/AFRL Workshop on Secure Knowledge Management (SKM'04), NY, September 2004. (Invited Paper).
213. B. Bhargava and L. Lilien. "Vulnerabilities and Threats in Distributed Systems," in Proceedings International Conference on Distributed Computing & Internet Technology (ICDCIT'04), Bhuvneshwar, India, December 2004. (Keynote paper).
214. G. Ding, X. Wu, and B. Bhargava. "A Simulation Study on Multi-Rate Mobile Ad Hoc Networks," in ACM Workshop on Performance Evaluation of Wireless Ad hoc, Sensor. Ubiquitous Networks, Venice, Italy, October 2004.
215. G. Ding and B. Bhargava. "Peer-to-Peer File-Sharing over Mobile Ad Hoc Networks," in First International Workshop on Mobile Peer-to-Peer Computing, pp. 104-108, FL, March 2004.
216. P. Ruth, D. Xu, B. Bhargava, and F. Regnier. "E-notebook Middleware for Accountability and Reputation Based Trust in Distributed Data Sharing Communities," in Proceedings of the 2nd International Conference on Trust Management, (Springer Verlag), pp. 161-175, London, UK, March 2004.
217. G. R. Murthy, M.S. Arunachalam, B. Bhargava, and E.G. Rajan. "System Identification Approach to Echo Cancellation," in Proceedings of International Conference on Systemic, Cybernetics and Informatics (ICSCI), Hyderabad, India, February 2004.
218. G. R. Murthy, M.S. Arunachalam, B. Bhargava, and E.G. Rajan. "Random Fading Channels," in Proceedings of International Conference on Systemic, Cybernetics and Informatics (ICSCI), Hyderabad, India, February 2004.
219. M. Hefeeda, A. Habib, B. Botev, D. Xu, and B. Bhargava. "PROMISE: A Peer-to-Peer Media Streaming System, in Proceedings of ACM Multimedia, November, 2003.
220. B. Bhargava. "Vulnerabilities and Fraud in Computer Systems," in Proceedings of the International Conference on Internet, Processing, Systems, and Interdisciplinary Research (IPSI), VIP Scientific Forum, Sv. Stefan, Serbia and Montenegro, October 2003.
221. X. Wu, B. Mukherjee, and B. Bhargava. "A Low-Cost, Low-Delay Location Update/Paging Scheme in Hierarchical Cellular Networks," in Proceedings of ACM International Workshop on Data Engineering for Wireless and Mobile Access, San Diego, September 2003.
222. B. Bhargava, Y. Zhong, and Y. Lu. "Fraud Formalization and Detection," in Proceedings of DaWak 2003, September 2003.
223. X. Jiang, Y. Dong, D. Xu, and B. Bhargava. "Gnu Stream: A P2P Streaming System Prototype," in Proceedings of IEEE International Conference on Multimedia & Expo (ICME), Baltimore, July, 2003.
224. W. Wang, B. Bhargava, Y. Lu, and X. Wu, "Detecting Wormhole Attacks in Ad Hoc Networks without Clock Synchronization Assumption" in ACM Workshop on Wireless Security (WiSe), Poster Session, in conjunction with MobiCom, September, 2003.

225. G. Ding, H. Ghafoor, and B. Bhargava. "Error Resilient Video Transmission over Wireless Networks," in Proceedings of the 6th IEEE International Symposium on Object-oriented Real-time Distributed Computing, Hakodate, Japan, May, 2003.
226. A. Habib, B. Bhargava. "Network Tomography-based Unresponsive Flow Control," in Proceedings of International Workshop on Future Trends of Distributed Computing Systems (FTDCS '03), San Juan, Puerto Rico, May, 2003.
227. M. Hefeeda and B. Bhargava. "On-Demand Media Streaming Over the Internet," in Proceedings of International Workshop on Future Trends of Distributed Computing Systems (FTDCS '03), San Juan, Puerto Rico, May, 2003.
228. Y. Chung, L. Lilien, B. Bhargava, and M. Mahoui. "Autonomous Transaction Processing Using Data Dependency in Mobile Environments," in Proceedings of International Workshop on Future Trends of Distributed Computing Systems (FTDCS '03), San Juan, Puerto Rico, May, 2003.
229. W. Wang, Y. Lu, and B. Bhargava. "On Security Study of Two Distance Vector Routing Protocols for Mobile Ad Hoc Networks," in Proceedings of IEEE International Conference on Pervasive Computing and Communications, Dallas, March, 2003.
230. Y. Lu, W. Wang, Y. Zhong, and B. Bhargava. "Study of Distance Vector Routing Protocols for Mobile Ad Hoc Networks," in Proceedings of IEEE International Conference on Pervasive Computing and Communications, Dallas, March, 2003.
231. A. Habib, M. Hefeeda, B. Bhargava. "Detecting Service Violations and DoS Attacks," in Proceedings of Network and Distributed System Software (NDSS 2003), San Diego, February, 2003.
232. Y. Lu, W. Wang, and B. Bhargava. "Hierarchical Structure for Supporting Movable Base Stations in Wireless Networks," in Proceedings of IEEE International Conference on Telecommunications, Tahiti, February 2003.
233. W. Wang, Y. Lu, and B. Bhargava. "On Vulnerability and Protection of Ad Hoc On-Demand Distant Vector Protocol," in Proceedings of IEEE International Conference on Telecommunications, Tahiti, February 2003.
234. F. Baumgartner, T. Braun, and B. Bhargava. "Design and Implementation of a Python-Based Active Network Platform for Network Management and Control," in Proceedings of IFIP-TC6 4th International Working Conference (IWAN2002), Zürich, Switzerland, December 2002.
235. F. Baumgartner, T. Braun, and B. Bhargava. "Virtual Routers: A Tool for Emulating IP Routers," in Proceedings of The 27th Annual IEEE Conference on Local Computer Networks (LCN 2002), Tampa, USA, November, 2002.
236. E. Maria, Y. Zhong, B. Bhargava, Pankaj, and S. Madria. "Building User Role Profiles using a Clustering Algorithm," in Proceedings of DaWak-2002 Conference, Aix en Provence, September 2002.
237. L. Bellatreche, L. Schneider, M. Mohania, and B. Bhargava. "Part Join: An Efficient Storage and Query Execution for Data Warehouses," in Proceedings of DaWak-2002 Conference, Aix en Provence, September 2002.
238. B. Bhargava and Y. Zhang. "Authorization Based on Evidence and Trust," in Proceedings of DaWak-2002 Conference, Aix en Provence, September 2002.

239. A. Habib, B. Bhargava, and S. Fahmy. "A Round Trip Time and Timeout Aware Traffic Conditioner for Differentiated Services Networks," in Proceedings of IEEE International Conference on Communications, NY, April 2002.
240. D. Xu, M. Hefeeda, S. Hambruch, and B. Bhargava. "On Peer-to-Peer Media Streaming," in Proceedings of IEEE International Conference on Distributed Computing Systems, Vienna, June, 2002
241. A. Habib, S. Fahmy, and B. Bhargava. "Design and Evaluation of an Adaptive Traffic Conditioner for Differentiated Services Network," in Proceedings of IEEE International Conference on Computer Networks, Scottsdale, October 2001.
242. A. Habib and B. Bhargava. "Unresponsive Flow Detection and Control using Differentiated Framework," in Proceedings of 13th International IASTED conference on Parallel and Distributed Computing, Los Angles, August 2001.
243. M. Mahoui, B. Bhargava, and Y. Zhong. "Separating Between Trust and Access Control Policies: A Necessity for Web Applications," in Proceedings of IEEE Workshop on Security in Distributed Data Warehousing, New Orleans, October 2001.
244. Y. Zhong, B. Bhargava, and M. Mahoui. "Trustworthiness Based Role Assignment in Dynamic Web Environment," in Proceedings of IEEE Workshop on Security in Distributed Data Warehousing, New Orleans, October 2001.
245. Y. Lu, B. Bhargava, and M. Hefeeda. "An Architecture for Secure Wireless Networking," in Proceedings of IEEE Workshop on Reliable and Secure Application in Mobile Environment, New Orleans, October 2001.
246. D. McClure and B. Bhargava. "On Assigning Priorities of Keying Parameters in a Secure Mobile Network," in Proceedings of IEEE Workshop on Reliable and Secure Applications in Mobile Environment, New Orleans, October 2001.
247. K. Xu and B. Bhargava. "A Functional Approach for Advanced Database Applications," in Third International Conference on Information Integration and Web-based Applications & Services (IIWAS 2001), Linz, Austria, September 2001.
248. Y. Lu and B. Bhargava. "Achieving Flexibility and Scalability: A New Architecture for Wireless Networks," in Proceedings of International Conference on Internet Computing (IC 2001), Las Vegas, June 2001.
249. M. Mohoui, B. Bhargava, and M. Mohania. "Data Mining for Web Security," in Proceedings of International Conference on Internet Computing (IC 2001), Las Vegas, June 2001.
250. Y. Zhong and B. Bhargava. "Authentication-Driven Authorization on Web Access," in Proceedings of International Conference on Internet Computing (IC 2001), Las Vegas, June 2001.
251. M. Mohania, V. Kumar, Y. Kambayashi, and B. Bhargava. "Secured Web Access," in Proceedings of International Conference on Digital Libraries: Research and Practice, November 13-16, Kyoto, Japan, 2000, pp. 132-146.
252. S. Madria, B. Bhargava, E. Pitoura, and V. KuMar. "Data Organization Issues in Location-dependent Query Processing in Mobile Computing," in Proceedings of ADBIS-DASFAA 2000, Prague, September 2000, LNCS 1884, pp. 142-156.

253. B. Bhargava. "Security in Data Warehousing," in Proceedings of International Conference on Data Warehousing and Knowledge Discovery (DaWak-2000), London, September 2000, LNCS 1874, pp. 287-289.
254. B. Bhargava. "Secure Mobile Systems," in Proceedings of International Conference on Mobility in Databases and Distributed Systems, London, September 2000, pp. 1-7. (Keynote talk)
255. B. Bhargava, S. Kamisetty, and S. Madria. "Fault Tolerant Authentication in Mobile Computing," in Proceedings of International Conference on Internet Computing (IC, 2000). Special Sessions on New Paradigms in Computer Security, June 2000, pp. 176-185.
256. S. Wang and B. Bhargava. "Experimental Evaluation of Design Tradeoff in Specialized Virtual Machine for Multimedia Traffic in Active Networks," in Proceedings of the IEEE International Conference on Multimedia System, New York, August 2000, pp. 412-418.
257. S. Wang and B. Bhargava. "An Adaptable Network Architecture for Multi-media Traffic Management and Control," in Proceedings of the IEEE International Conference on Multimedia System, New York, August 2000, pp. 670-675.
258. B. Bhargava. "Experiments in Adaptability and Security in Multi-Media Systems," in Proceedings of IEEE International Conference on Database and Expert Systems Application (DEXA 98), Florence, 1999, pp. 573-583.
259. B. Bhargava. "Degrees of Commitment in Transaction Processing," in IEEE Conference on Reliability and Quality in Design, August 1999, Las Vegas. (Invited presentation in a session organized by Rome Lab, Kevin-Keviat.)
260. C. Shi, S. Wang, and B. Bhargava. "MPEG Video Encryption in Real-time Using Secret Key Cryptography," in Proceedings of the International Conference on Parallel and Distributed Processing Techniques and Applications (PDPTA'99), 1999, Las Vegas, Nevada, USA, pp. 2822-2829.
261. S. Goel, B. Bhargava, and S. Madria. "Adaptive Constrained Locking Protocol for High Data Contention Environments," in Proceedings of the 6th International Conference on Database Systems for Advanced Applications (DASFAA'99), Taiwan, 1999, pp. 97-107.
262. A. Bhargava and B. Bhargava. "Measurements and Quality of Service Issues in Electronic Commerce Software," in Proceedings of IEEE Conference on Application-Specific Software Engineering and Technology (ASSET-99), TX, 1999, pp. 28-37.
263. C. Shi and B. Bhargava. "An Efficient and Secure MPEG Video Encryption Algorithm," in Proceedings of the 18th IEEE Symposium on Reliable Distributed Systems, West Lafayette, 1998, pp. 387-392.
264. B. Ramamurthy, S. Upadhyaya, and B. Bhargava. "Design and Analysis of a Hardware-Assisted Check Pointing and Recovery Scheme for Distributed Applications," in Proceedings of the 18th IEEE Symposium on Reliable Distributed Systems, West Lafayette, 1998, pp. 84-90.
265. S. Madria and B. Bhargava. "On the Correctness of a Transaction Model for Mobile Computing," in Proceedings of IEEE International Conference on Database and Expert Systems Application (DEXA 98), Vienna, 1998, pp. 573-583.
266. S. Madria and B. Bhargava. "A Transaction Model for Mobile Computing," in Proceedings of IEEE International Database Engineering and Application Symposium (IDEAS'98), 1998, pp. 92-102.

267. S. Wang and B. Bhargava. "A Fragmentation Scheme for Multimedia Traffic Active Networks," in Proceedings of the 18th IEEE Symposium on Reliable Distributed Systems, West Lafayette, October 1998.
268. C. Shi and B. Bhargava. "An Efficient MPEG Video Conferencing Encryption Algorithm," in Proceedings of the 6th ACM International Multimedia Conference, September 1998, Bristol, UK, pp. 81-88.
269. S. Madria and B. Bhargava. "On the Correctness of a Transaction Model for Mobile Computing," in Proceedings of IEEE International Conference on Database and Expert Systems Application (DEXA 98), Vienna, August 1998, pp. 573-583.
270. B. Bhargava. "Network Behavior and Quality of Service in Emerging Applications," in Proceedings of KSEA (Korean-American Scientists & Engineers Association)-AAAS Symposium, Chicago, April 1998.
271. S. Madria and B. Bhargava. "A Transaction Model for Mobile Computing," in Proceedings of IEEE International Database Engineering Application Symposium, (IDEAS'98), July 1998 UK, pp. 92-102.
272. B. Bhargava. "Adaptable Software for Communications in Video Conferencing," in Proceedings of the IEEE Symposium on Application-Specific Software Engineering and Technology, (ASSET-98), Dallas, March 1998.
273. C. Shi and B. Bhargava. "A light-weight MPEG Video Encryption Algorithm," in Proceedings of the International Conference on Multi-Media, McGraw Hill Press, January 1998, pp. 55-65.
274. S. Madria and B. Bhargava. "System Defined Prewrites to Increase Concurrency in Databases," in Proceedings of East-European Symposium on Advances in Databases and Information Systems, (in co-operation with ACM-SIGMOD), St. Petersburg, Russia, September 1997, pp. 18-26.
275. S. Madria, S. Maheshwari, B. Chandra, and B. Bhargava. "Crash Recovery Algorithm in an Open and Safe Nested Transaction Model," in Conference on Database and Expert System Applications (DEXA'97), 1997, France. Lecture Notes in Computer Science, Springer Verlag, Vol. 1308, pp. 440-451.
276. S. Wang and B. Bhargava. "Multi-pass Transmission Policy: An effective method for transmitting large Multimedia objects over Wide Area Networks," in Proceedings of 21st IEEE International COMPSAC Conference, August 1997, Washington DC, pp. 382-388.
277. S. Li and B. Bhargava. "Active Gateway: A facility for Video Conferencing Traffic Control," in Proceedings of 21st IEEE International COMPSAC Conference, August 1997, Washington DC, pp. 308-312.
278. M. Annamalai and B. Bhargava. "Defining Data Equivalence for Efficient Access of Images in a Distributed Environment," Proceedings of the Second World Conference on Integrated Design and Process Technology, December 1-4, 1996, Austin, pp. 11-18
279. S. Goel and B. Bhargava. "Object 'Request' Based Clustering for Method Processing in Object-Oriented Database System," Proceedings of the Second World Conference on Integrated Design and Process Technology, December 1-4, 1996, Zurich, pp. 1-10.
280. M. Annamalai, A. Sundaram, and B. Bhargava. "A Color-based Technique for Measuring Visible Loss for Use in Image Data Communication," Proceedings of the Seventh International Conference on Database and Expert Systems Applications (DEXA '96). Lecture Notes in Computer Science (LNCS 978), September 1996, Zurich, pp. 39-48.

281. K. Xu and B. Bhargava. "An Introduction to Enterprise-Participant Data Model," Proceedings of the Seventh International Conference on Database and Expert Systems Applications (DEXA '96). Lecture Notes in Computer Science (LNCS 978), September 1996, pp. 410-417.
282. B. Bhargava, S. Li, S. Goel, and J. Huai. "A Distributed Video-on Demand System for Videoconferencing," in Proceedings of the IETE International Conference on Multi-media Information Systems (MULTIMEDIA 96), February 1996, New Delhi, India. Published by McGraw Hill, pp. 83-93.
283. B. Bhargava, S. Li, S. Goel, C. Xie, and C. Xu. "Performance Studies for an Adaptable Videoconferencing System," in Proceedings of the IETE International Conference on Multi-media Information Systems (MULTIMEDIA 96), February 1996, New Delhi, India, Published by McGraw Hill, pp. 106-116.
284. B. Bhargava, S. Li, S. Goel, P. Tang, and Y. Zhang. "Impact of the CODEC Schemes on Multimedia Communication," in Proceedings of the IETE International Conference on Multi-media Information Systems (MULTIMEDIA 96), January 1996, New Delhi, India, Published by McGraw Hill, pp. 94-105.
285. S. Goel and B. Bhargava. "Supporting Method Migration in a Distributed Object Database System: A Performance Study," Proceedings of 29th Hawaii International Conference on System Sciences (HICSS 29), IEEE, January 1996, pp. 31-40.
286. B. Bhargava and S. Goel and Y. Zhang. "A study of Distributed Transaction Processing in an Internet work," in Proceedings of the International Conference on Computer information Systems and Management of Databases (CISMOD). Lecture notes in Computer Science (LNCS 1006), November 1995, Bombay, India, pp. 135-152.
287. B. Bhargava, S. Li, S. Goel, J. Huai. "VC Secretary: A Mechanism for Video Conferencing Support," in Proceedings of the International Society of Optical Engineering International Conference on Multi-Media Systems, SPIE Proceedings, Vol. 2617, pp. 89-99, October 1995.
288. B. Bhargava and M. Annamalai. "Communication Costs in Digital Library Databases," in Proceedings of the Sixth International Conference on Database and Expert Systems and Application, Lecture Notes in Computer Science (LNCS 978), September 1995, London, pp. 1-13.
289. B. Bhargava, M. Anammalai, and E. Pitoura. "Digital Library Services in Mobile Computing," ACM SIGMOD Record, 24(4), Invited Paper, Special Issue on Mobile Computing, December 1995, pp. 34-39.
290. E. Pitoura and B. Bhargava. "A Framework for Providing Consistent and Recoverable Agent-Based Access to Mobile Heterogeneous Databases," ACM SIGMOD Record, 24(3), September 1995, pp. 44-49.
291. B. Bhargava, Y. Jiang and S. Goel. "A Layered Architecture for Supporting Objects in a Relational System: A Performance Study," in Proceedings of the Sixth International Conference on Database and Expert Systems and Application, Springer Verlag Lecture Notes in Computer Science (LNCS 978), September 1995, London, pp. 323-333.

292. E. Pitoura, A. Zhang and B. Bhargava. "A View-based Approach to Relaxing Global Serializability in a Multidatabase System," in Proceedings of the 14th Annual ACM Symposium on the Principles of Distributed Computing (PODC95), short paper, August 1995. Ottawa, Canada.
293. B. Bhargava, S. Li, and J. Huai. "Building High Performance Communication Services for Digital Libraries," in Proceedings of Advances in Digital Library, published by NASA, 1995, Mcleans, Virginia, pp. 232-240, 1995.
294. E. Pitoura and B. Bhargava. "Maintaining Consistency of Data in Mobile Distributed Environments," in Proceedings of the 15th IEEE International Conference on Distributed Computing Systems, (ICDCS95), pp. 404-413, May 1995.
295. A. Helal and B. Bhargava. "Performance Evaluation of the Quorum Consensus Replication Methods," Proceedings of the IEEE International Computer Performance and Dependability Symposium (IPDS'95), Erlangen, Germany, pp. 165-172, April 1995.
296. B. Bhargava, M. Annamalai, S. Goel, S. Li, E. Pitoura, A. Zhang, and Z. Zhang. "DL-Raid: An Environment for Supporting Digital Library Services," in Issues in Digital Libraries, (N. Adams, B. Bhargava, and Y. Yesha, eds.), Springer Verlag LNCS 916, 1995, pp. 281-300.
297. E. Pitoura and B. Bhargava. "Revising Transaction Concepts for Mobile Computing," in Proceedings of the First IEEE conference on Mobile Computing Systems and Applications (MCSA94), pp. 164-168, December 1994. A one-page abstract appears also in TCOS Bulletin, Spring 1995.
298. B. Bhargava and S. Li. "A Conceptual Model for Multi-Media Database Systems," in Proceedings of the INSDOC CISMODO Conference, October 1994, Madras, India. (Published by Indian National Scientific Documentation Center), pp. 115-134.
299. E. Pitoura and B. Bhargava. "Building Information Systems for Mobile Environments," in Proceedings of the Third ACM International Conference on Information and Knowledge Management (CIKM 1994), pp. 371-378, November 1994, Washington, DC.
300. Y. Jiang, X. Liu and B. Bhargava. "Re-Evaluating Indexing Schemes for Nested Objects," in Proceedings of the Third ACM International Conference on Information and Knowledge Management (CIKM 1994), pp. 612-619, November 1994, Washington, DC.
301. Bhargava and A. Zhang. "Scheduling with Compensation in Multi-database Systems," in Third IEEE International Conference on System Integration, August 1994, San Paulo, Brazil, (invited paper), pp. 699-707.
302. A. Zhang, M. Nordine, B. Bhargava, and O. Bukhres. "Ensuring Semi-Atomicity for Flexible Transactions in Multi-database System," in Proceedings of the ACM SIGMOD Conference, May 1994, Minneapolis, pp. 67-78.
303. A. Zhang and B. Bhargava. "Enforceable Inter-database Constraints in Integrating Multiple Autonomous Databases," in IEEE Proceedings of the Fourth International Conference on Data and Knowledge Systems for Manufacturing and Engineering, May 1994, Hong Kong, pp. 645-650.
304. B. Bhargava and A. Helal. "Availability Mechanisms in Raid Distributed Database System," in International Conference on Information and Knowledge Management (CIKM), November 1993, Washington DC.

305. Y. Zhang and B. Bhargava. "WANCE: Wide Area Network Communication Emulation Systems," in Proceedings of the IEEE Workshop on Parallel and Distributed Systems, Princeton, N.J., October 1993.
306. B. Bhargava, Y. Jiang. "O-Raid: Experiments and Experiences," in Proceedings of International Conference on Intelligent and Cooperative Information Systems, Rotterdam, Netherlands, May 1993, (invited paper).
307. J. Srinivasan, Y. Jiang, and B. Bhargava. "Experiments in O-Raid Distributed Object-Oriented Database System," in Proceedings of the International Conference on Information and Knowledge Management, Baltimore, November 1992.
308. B. Bhargava. "From Relational to Object Based Distributed Database System," in Baltimore, November 1992, (invited paper).
309. H. Tirri, J. Srinivasan, and B. Bhargava. "Federated Objects: A Pragmatic Approach to Data Integration," in Proceedings of International Workshop on Distributed Object Management, Edmonton, Canada, August 1992.
310. B. Bhargava, S. Browne, and J. Srinivasan. "Composite Object Replication in Distributed Database Systems," in Proceedings of the International Conference on Information System and Management of Data, Bangalore, Published by INSOC, July 1992, pp. 115-134.
311. T. Nixon, K. Lubenow, J. Srinivasan, P. Dewan, and B. Bhargava. "Building a User-Interface for the O-Raid Database System using the Suite Systems," in Proceedings of the International Conference on System Integration, Newark, June 1992.
312. Helal, Y. Zhang, and B. Bhargava. "Surveillance for Controlled Performance Degradation during Failures," in Proceedings of the 25th Hawaii International Conference on Systems Sciences, Hawaii, January 1992.
313. B. Bhargava. "Experiments in Raid Distributed Systems," in Proceedings of the International Seminar on Directions of Future Database Research (Abstract), Dagshule, September 1991.
314. Auddino, E. Amiel, and B. Bhargava. "Experiences with SUPER, a Database Visual Environment," in Proceedings of the International Conference on Databases and Expert System Applications (DEXA), Berlin, August 1991.
315. E. Mafla and B. Bhargava. "Implementation and Performance of a Communication Facility for Distributed Transaction Processing," in Proceedings of the Second Usenix Symposium on Experiences with Distributed and Multiprocessor Systems, Atlanta, March 1991.
316. B. Bhargava and S. Lian. "Typed Token Approach for Database Processing During Network Partitioning," in Proceedings of International Conference on Management of Data (COMAD), New Delhi, India, December 1990.
317. B. Bhargava and A. Helal. "Replication Experiments in Raid Distributed Database Systems, Indian Computer Congress," Hyderabad, India, November 1990. (keynote talk)
318. B. Bhargava and S. Browne. "Communication-based Recovery in Replicated Databases," in Tenth International Conference on Computer Communications, New Delhi, India, November 1990.
319. J. Mullen, J. Srinivasan, P. Dewan, and B. Bhargava. "Supporting Queries in the O-Raid Object-Oriented Database System," in Fourteenth IEEE Computer Software and Applications Conference, Chicago, Ill, October 1990.

320. B. Bhargava, K. Friesen, A. Helal, and J. Riedl. "Adaptability Experiments in the Raid Distributed Database Systems," in Proceedings of Ninth IEEE Symposium on Reliability in Distributed Systems, Huntsville, AL, October 1990.
321. B. Bhargava, E. Mafla and J. Riedl. "Communication in the Raid Distributed Database System," in Proceedings of Ninth IEEE International Phoenix Conference on Computers and Communications, Scottsdale, AZ, March 1990.
322. B. Bhargava, S. Browne. "Adaptable recovery Using Dynamic Quorum Assignments," in Proceedings of the Sixteenth International Conference on Very Large Data Bases (VLDB), Brisbane, Australia, August 1990.
323. B. Bhargava, P. Dewan, J. Mullen and A. Vikram. "Implementing Object Support in the RAID Distributed Database System," in Proceedings of First IEEE International Conference on System Integration, Morris Town, NJ, April 1990.
324. B. Bhargava, P. Leu, S. Lian. "Experimental Evaluation of Concurrent Check-pointing and Rollback-Recovery Algorithms," Proceedings of 6th IEEE Data Engineering Conference, Los Angeles, February 1990.
325. C. Koelbel, F. Lamaa, B. Bhargava. "Efficient Implementation of Modularity," in Proceedings of USENIX-IEEE Workshop on Experiences with Building Distributed (Multiprocessor) System, October 1989, Florida.
326. P. Dewan, B. Bhargava, A. Vikram. "Engineering the Object-Relation Database Model in O-Raid," in Proceedings of the International Conference on Foundations of Data Organization and Theory, June 1989, Paris (Springer Verlag, Vol. 367).
327. Bhargava and P. Leu. "A Model for Concurrent Check-pointing and Recovery Using Transactions," in Proceedings of the Ninth IEEE International Conference on Distributed Computing Systems, June 1989, Newport Beach, Ca.
328. Helal, J. Srinivasan, and B. Bhargava. "SETH: A Quorum-Based Replicated Database for Experimentation with Failures," in Proceedings of the Fifth IEEE Data Engineering Conference, February 1989, Los Angeles.
329. B. Bhargava, E. Mafla, J. Riedl and B. Sauder. "Implementation and Measurements of Efficient Communication Facilities for Distributed Database Systems," in Proceedings of the Fifth IEEE Data Engineering Conference, February 1989, Los Angeles.
330. B. Bhargava and S. Browne. "A Generic Algorithm for Transaction Processing During Network Partitioning," in Proceedings of the Eighth International Conference on Foundations of Software Technology and Theoretical Computer Science, December 1988, Pune, India (Springer Verlag, Vol. 338).
331. B. Bhargava and S. Browne. "Using Replication to Implement Reliable Storage," in Proceedings of the Twenty-sixth Annual Allerton Conference on Communication, Control, and Computing, September 1988, Monticello, IL.
332. B. Bhargava and S. Lian. "Independent Check-pointing and Concurrent Rollback for Recovery in Distributed Systems-An Optimistic Approach," in Proceedings of the Seventh IEEE Symposium on Reliability in Distributed Systems, October 1988, Columbus.
333. B. Bhargava and J. Riedl. "Implementation of RAID," in Proceedings of the Seventh IEEE Symposium on Reliability in Distributed Systems, October 1988, Columbus.

334. B. Bhargava, D. Sabo, and P. Noll. "An Experimental Analysis of Replicated Copy Control during Site Failure and Recovery," in Proceedings of the Fourth IEEE Data Engineering Conference, February 1988, Los Angeles.
335. B. Bhargava, T. Mueller, and J. Riedl. "Experimental Analysis of Layered Ethernet Software," in Proceedings of the ACM-IEEE Fall Joint Computer Conference, October 1987, Dallas.
336. B. Bhargava and J. Riedl. "Design on an Adaptable Distributed System," in Proceedings of the Tenth IEEE International Conference on Computer Software and Applications, Chicago, 1986, pp.114-122.
337. B. Bhargava and J. Riedl. "Implementation of Distributed Transactions in RAID," IEEE Computer Society's Workshop on Design Principles for Experimental Distributed Systems, Purdue University, 1986 (abstract only). (Extended version was invited for presentation at ACM SIGOP Workshop, Making Distributed Systems Work, Amsterdam, September 1986.)
338. P. Leu and B. Bhargava. "Multidimensional Timestamp Protocols for Concurrency Control," in Proceedings of the Second IEEE Data Engineering Conference, Los Angeles, 1986, pp. 482-489.
339. B. Bhargava and Z. Ruan. "Site Recovery in Distributed Database Systems with Replicated Data," in Proceedings of the Sixth IEEE International Conference on Distributed Computing Systems, Cambridge, 1986, pp. 621-627.
340. C.Hua, B. Bhargava: Analysis of the Majority Consensus Concurrency Control Algorithm for Correctness and Performance Using the Event Ordering Approach. INFOCOM 1983: 340-351
341. B. Bhargava and L. Lilien. "Cost Analysis of Selected Database Restoration Techniques," in Proceedings of the International Conference on Entity-Relationship Approach, Anaheim, 1983, pp. 783-805.
342. C. Hua and B. Bhargava. "Analysis of the Majority Consensus Concurrency Control Algorithm for Correctness and Performance Using the Event Ordering Approach," in Proceedings of the IEEE Conference on Information and Communication, San Diego, 1983.
343. B. Bhargava. "Evaluation of Network Merging based on Optimistic Concurrency Control and Rollback Semantics," in Proceedings of the Sixth IEEE International Conference on Computer Software and Applications, Chicago, 1982.
344. C. Hua and B. Bhargava. "Classes of Serializable Histories and Synchronization Algorithms in Distributed Database Systems," in Proceedings of the IEEE International Conference on Distributed Computing Systems, Miami, 1982, pp. 438- 446.
345. B. Bhargava. "Performance Evaluation of the Optimistic Concurrency Control Approach to Distributed Database Systems and its Comparison with Locking," IEEE International Conference on Distributed Computing Systems, Miami, 1982, pp. 508- 517.
346. B. Bhargava. "'Resiliency features of the optimistic concurrency control approach for distributed database systems" Proceedings of 2nd IEEE Symposium on Reliability in Distributed Software and Database Systems, 1982
347. B. Bhargava. "Software Reliability in Real-Time Systems,' 'in Proceedings of the National Computer Conference, 1981, pp. 297-309.

348. B. Bhargava and L. Lilien. "Feature Analysis of Selected Database Recovery Techniques," in Proceedings of the National Computer Conference, pp. 543-553, 1981.
349. B. Bhargava. "An Optimistic Concurrency Control Algorithm and its Performance Evaluation Against Locking," in Proceedings of the International Computer Symposium, Taiwan, 1980.
350. C. McDonald, B. Bhargava, and D. Jeris. "A Clinical Information System for Ambulatory Care," in Proceedings of the National Computer Conference, 1975, pp. 749-756.
351. B. Bhargava and C. McDonald. "Tree Systems for Medical Information Processing," Proceedings of Eleventh Annual Rocky Mountain Bio-engineering Symposium, 1974.
352. B. Bhargava and K. Fu. "Transformation and Inference of Tree Grammars for Syntactic Pattern Recognition," in Proceedings of the IEEE International Conference on System, Man, and Cybernetics, 1974, pp. 330-334.
353. B. Bhargava and K. Fu. "Stochastic Tree Systems for Syntactic Pattern Recognition," in Proceedings of the Twelfth Annual Allerton Conference on Circuit and System Theory, 1974, pp. 278-287.

Research Grants/Contracts

1. Intelligent Autonomous Systems, Northrop-Grumman Corporation, \$150,000, 2017-2018
2. Privacy Preserving Data Dissemination and Data leakage, Purdue Computer Science Corporate Partner Award, Support of one graduate student and travel 2017-2018
3. Engineering Security and Performance Aware Vehicular Applications for Safe and Smarter Roads, Funded by Qatar Foundation (with Ala Al-Fuqaha and Elyes Ben Hamida), \$1,000,000, 2015-2018 (Purdue share \$135,000)
4. Secure/Resilient Systems and Data Dissemination/Provenance, Northrop-Grumman Corporation, \$200,000, 2016-2017
5. Privacy-Preserving Data Dissemination and Adaptable Service Compositions in Trusted & Untrusted Cloud, Northrop-Grumman Corporation, \$210,000 (additional \$40,000 for MIT collaboration), 2015-2016
6. Monitoring-Based System for E2E Security Auditing and Enforcement in Trusted and Untrusted SOA, Northrop-Grumman Corporation, \$199,992, 2014-2015
7. End to End Security in Mobile Cloud, AFRL, \$11,000, 2013
8. End to End Security Policy Auditing and Enforcement in Service Oriented Architecture, Northrop-Grumman Corporation, \$200,000, 2013-2014
9. Planning Grant: I/UCRC for Net-Centric Software and Systems Center Research Center, NSF, \$24,123, 2013-2015
10. Protecting and Securing Supply Chain Data throughout its Life-cycle and CERIAS security center, \$15,000, 2012-2013
11. Protecting and Securing Supply Chain Data throughout its Life-cycle, PLM center of Excellence, \$30,000, 2012-2013
12. Opportunistic Resource Utilization Networks for UAV Ad-Hoc Networking, Navy STTR (with Andrew DeCarlo and Leszek Lilien), Amount: \$70,000, 2010-2011
13. Security in Service-Oriented Architecture, Air Force, Amount: \$295,000, 2010-2011

14. Context based Adaptable Defense against Collaborative Attacks in Service Oriented Architecture, Northrop-Grumman Corporation, Amount: \$105,000, 2009-2010
15. ``ITR: Scalable Edge Router for Differentiated Services Networks,’’ NSF, Amount: \$364,828, (2002-2008).
16. ``Vulnerability Analysis and Threat Assessment,’’ NSF REU grant, Amount \$5,000, (2008-2009)
17. ``Workshop on Pervasive Systems’’, Funding obtained from CRA-W, Air Force, and proposal submitted to NSF (with Sanjay Madria), 2008
18. Event-order based model for Collaborative Attack, PRF, 2008-2010
19. ``Collaborative Attacks on Wireless Networks’’, Institute for Information Infrastructure Protection (I3P) Through Homeland Security and Dartmouth College, Amount \$150,000 (2007-2009)
20. ``Supplement to Secure Mobile Systems’’, NSF, Amount: \$52,000 (2006-2007).
21. ``The Regenstrief Institute for Healthcare Engineering: Applying the Principles of Engineering and Management for the Improvement of Healthcare,’’ Regenstrief Foundation, Amount: \$1,000,000 per year (with Joe Pekny and Charles Rutledge and others), (2004-2014).
22. ``Secure Private Communication in Mobile Ad Hoc Networks,’’ Institute for Information Infrastructure Protection (I3P) Through Homeland Security and Dartmouth College, Amount: \$149,081, (2004-2006).
23. ``Supplement: ITR: Scalable Edge Router for Differentiated Services Networks,’’ NSF, Amount: \$45,000, (2006-2008).
24. ``REU Supplement: ITR: Scalable Edge Router for Differentiated Services Networks,’’ NSF, Amount: \$15,000 (2006-2008).
25. ``Cellular Assisted Mobile Ad hoc (CAMA) Networks,’’ funded by Motorola, Amount: \$30,000, (2003).
26. ``Vulnerability Analysis and Threat Assessment/Avoidance,’’ NSF, Amount: \$212,473, (2003-2009).
27. ``Trusted Routing and Intruder Identification in Mobile Ad Hoc Networks,’’ CERIAS and Lilly Foundation, Amount: \$22,000, (2002-2003).
28. ``Trusted Route Recovery in Ad Hoc networks,’’ CISCO, Amount: \$85,000, (2002-).
29. ``ITR: Scalable Edge Router for Differentiated Services Networks,’’ NSF, Amount: \$364,828, (2002-2008).
30. ``Formalizing Evidence and Trust for User Authorization,’’ NSF, Amount: \$335,593, (2002-2007).
31. ``Experiments in Security and QoS in Mobile Systems,’’ NSF, Amount: \$109,000, (2001-2003).
32. ``Behavior Based Artificial Agents for Information Security,’’ CERIAS and Lilly Foundation, Amount: \$62,500, (with A. Chaturvedi and S. Mehta), (2001-2002).
33. ``Secure, Survivable, Jam Resistant Communications and Network Management,’’ CERIAS and Lilly Foundation, Amount: \$75,000, (with M. Zoltowski’s), (2001-2002).

34. ``Consortium for E-commerce Center," Indiana 21st Century Research and Technology Fund, Amount: \$1,000,000. (PI: Professor S. Mehta in Krannert), (2001-2003).
35. ``Time Based Coordination of Network Embedded Nodes," DARPA, Amount: \$1,900,000. (PI: Professor Kim at UC Irvine), (2001-2004).
36. ``Secure Mobile Systems," NSF, Amount: \$279,172 (2000-2006).
37. ``Static and Dynamic Security in Web Data warehouses," CERIAS and Lilly Foundation, (with Madria and Mohania) Amount: \$70,000 (2000-2002).
38. ``MSI: A Research Infrastructure for Integrated Quality of Service in Multimedia Computing Environments," NSF, (with seven Co-PIs), Infrastructure Grant, Amount: \$2,600,000 (1999-2004).
39. ``Distributed System Architecture and Services for Multimedia Systems," IBM, Amount: \$35,000 (1999-2003).
40. ``Experiments in Adaptable Distributed Systems," NSF, (1999-2003), Amount: \$251,500.
41. ``Experiments in Adaptable Communication Systems," NS, (1999-2001), Amount: \$66,000.
42. ``Security Issues in Mobile Networks with Movable Base Stations," CERIAS and Lilly Foundation, Amount: \$80,000, (1999-2001).
43. ``Multimedia Traffic Control using Active Networks," PRF, Amount: \$23,332, (1999-2001).
44. ``Adaptable Video Conferencing," (collaboration with EPFL, Lausanne), Purdue Office of International Programs, Amount: \$2,500.
45. ``Experiments in Adaptable Communication Services," NSF, (1999-2001), Amount \$66,000.
46. ``Integrated Analysis & Testing of Distributed Software," IBM, (1997-1998), Amount: \$49,998.
47. ``REU Supplement to Communication Experiments for Widely Distributed Environments," NSF, (1996-1998), Amount: \$10,000.
48. ``Adaptable Video Conferencing," AT&T Foundation, (October 1995-September 1996), Amount: \$23,000.
49. ``Distributed System Control," Air Force Rome Laboratory (via Lockheed Martin), (1995-1996), Amount: \$75,000.
50. ``REU Supplement to Communication Experiments for Widely Distributed Environments," NSF, (1997-1998), Amount: \$10,000.
51. ``Consistency and Transaction Management in Mobile Computing Environment," Purdue Research Fellowship grants, (February 1994), Amount: \$20,400.
52. ``Communication Experiments for Widely Distributed Environments," National Science Foundation, Amount: \$314,641, (July 1995-December 1999).
53. ``Characterization of Architecture Framework and Replication," Defense Information System Agency (DISA), Amount \$75,000, (August 1994-January 1995). (Through Army Research Laboratory Contract).

54. ``Information Retrieval for a Large Repository of Complex Data," NASA, (July 1994-June 1997), Amount: \$66,000.
55. ``Six International Travel grants," Purdue Research Foundation and MUCIA.
56. ``Experiments in Large Scale Distributed Systems," AT&T Foundation, (November 1993-October 1994), Amount: \$25,000 (with Michael Young).
57. ``Experiments in Transition to Large Scale Open System Environment," Army Research Laboratory (Software Technology Branch), (January 1993-1995), Amount: \$812,000 (joint funding with DISA).
58. ``Experiments in Adaptability to Failures in Distributed Systems," NASA, (July 1991-June 1994), Student Fellowship, Amount: \$22,000 per year.
59. ``Communications Software for Reliable Distributed Systems," AT&T Foundation, (November 1990), Amount: \$30,000.
60. ``Distributed Object Database System," NASA, (July 1990-June 1993), Student Fellowship, Amount: \$22,000 per year.
61. ``Reliable Processing in Distributed Database Systems," National Science Foundation (REU supplement), (May 1990-July 1991), Amount: \$8,000.
62. ``Adaptability to Failures in Distributed Systems," Purdue Research Foundation, (August 1990 -August 1992), Amount: \$24,000.
63. ``Design and Implementation of an Adaptable Distributed System," U.S. Army Institute for Research in Management Information, Communication, and Computer Sciences (AIRMICS), (January 1992-December 1992), Amount: \$101,832.
64. ``Design and Implementation of an Adaptable Distributed System," U.S. Army Institute for Research in Management Information, Communication, and Computer Sciences (AIRMICS), (April 1990-December 1991), Amount: \$98,554.
65. ``Reliable Processing in Distributed Database," National Science Foundation, (August 1989-July 1991), Amount: \$57,027.
66. ``Check-pointing in Distributed Systems," Purdue Research Foundation, (August 1988-August 1990), Amount: \$14,400.
67. ``Replication Copy Control," Unisys, (August 1988-August 1989), Amount: \$30,000.
68. ``Experiments in Communications and Distributed Systems," AT&T, (November 1988-December 1989), Amount: \$30,000.
69. ``Design of an Adaptable Distributed System: Phase IV," AIRMICS (grant via NASA), (May 1989-April 1990), Amount: \$120,281.
70. ``Design of an Adaptable Distributed System: Phases III," AIRMICS (grant via NASA), (March 1988-April 1989), Amount: \$115,600.
71. ``Design of an Adaptable Distributed System: Phase II," AIRMICS (grant via NASA), (May 1987-February 1988), Amount: \$122,391.
72. ``Design of an Adaptable Distributed System," AIRMICS (grant via NASA), (June 1986-May 1987), Amount: \$83,473.
73. ``Design of an Adaptable Distributed System," NASA, (June 1986-May 1987), Amount: \$31,075.

74. ``Site Failure/Network Partition Recovery,’’ SPERRY Corporation, (June 1, 1986-March 1988) (with Mike Atallah), Amount: \$60,000.
75. ``Design of an Adaptable Distributed System,’’ Purdue Research Foundation (August 1986-July 1988), Amount: \$14,100.
76. ``Reliability and Integrity in Distributed Database Systems,’’ SPERRY Corporation, (June 1, 1985-May 31, 1986) (with Mike Atallah), Amount: \$60,000.
77. ``An Integrated Approach to Software Reliability,’’ U.S. Dept. of Transportation, (1985-1988): up to \$200,000, based on task-order contracts.
78. ``Systems Structures for Software Reliability in Enroute Air Traffic Control Systems,’’ (Phases 2 and 3) U.S. Dept. of Transportation, (March 1983-February 1985), Amount: \$64,000.
79. ``Systems Structures for Software Reliability in Enroute Air Traffic Control Systems,’’ U.S. Dept. of Transportation, (September 1980-March 1983), Amount: \$56,000.
80. ``Software Reliability in Air Traffic Control Systems,’’ U.S. Dept. of Transportation, (September 1979-August 1980), Amount: \$47,000.

Editorial Boards

1. Editor-in-Chief: International Journal of Security and Its Applications (ISSN: 1738-9976)
2. Editor-in-Chief: International Journal of Information and Telecommunication Technology (ISSN:0976-5972)
3. Editor-in-Chief: International Journal on Computing (JoC) published by Global Science and Technology Forum (GSTF, www.globalSTF.org) (2010-2017)
4. Editor-in-Chief of International Journal of Multimedia Technology (IJMT)
5. Editor-in-Chief of Journal of Advanced Computer Science & Technology (ISSN: 2227-4332)
6. Editor of IEEE Transactions on Cloud Computing, (2016-)
7. Editor of IEEE Transactions on Knowledge and Data Engineering, (1996-2000)
8. World Wide Web Journal (Guest Editor), Special Issue on Information Management on Internet, (2002).
9. Editor of Journal of System Integration, (1999-2012).
10. Editor of International Journal of Advance Innovations, Thoughts & Ideas (ISSN: 2277-1891)
11. Editor of International Journal of Multi-Media Systems' Tools and Applications, (1998-).
12. Editor of International Journal of Cooperative Information Systems, (1999-2012).
13. Editor of IEEE Transactions on Mobile Computing, (2004-2008).
14. Editor of Wiley Journal on Wireless Communications and Mobile Computing, (2003 -).
15. Editor of International Journal of Computers and Applications, (2003 -).
16. Member of Advisory Board International Journal on Systems, Cybernetics, and Informatics (Indian publication), (2012-)
17. Editor of International Journal of Communication Networks and Distributed Systems, (IJCND) (2011-)

18. Editor of Recent Patents On Computer Science, Bentham Science Publishers (2011-)
19. Guest Editor: IET Communication (formerly IEE Proceedings on Communication), (2011-)
20. Member of Advisory Board for the Journal of Science, Technology and Management, India
21. Associate editor of International Journal on Digital Library Systems, (2010- 2014)
22. Editor of Journal of Advances in Multimedia, (2011-)
23. Advisory Board of FTRA - Future Technology Research Association International
24. Editor of *Journal of Information Security (JIS)*, (2010-)
25. Editor of International Journal of Information and Telecommunication Technology, (2010-)
26. International Journal of Next-Generation Computing (IJNGC), (2010-)
27. Recent Patents On Computer Science, Bentham Science Publishers, (2010-)
28. Journal of Immune Computation, ISSN : 2234-4306 (Print), ISSN : 2234-4314 (Online)
29. International Journal of Cloud-Computing and Super-Computing (IJCS)(2017-)GV School, Australia.
30. International Journal. of Information Technology, Communications and Convergence (IJITCC), ISSN online: 2042-3225, ISSN print: 2042-3217

NATIONAL PROFESSIONAL COMMITTEES

Major Role

1. Best paper C.V. Ramamoorthy award chair, IEEE Symposium on Reliable Distributed Systems, 2018, Brazil
2. Organizing Committee, International Conference on Satellite and Telecommunication, September 2018, Stockholm, Sweden
3. Keynote Speaker, International Conference on Recent Innovation in Computing, March 2018, Jammu, India
4. Keynote Speaker, IEEE International Conference on Advanced Networks and Telecommunications Systems (AINTS), December 2017, Bhubaneswar, India
5. Co-chair, International Symposium on Multi-media Security and Digital Forensic Conference, December 2017, Guangzhou, China
6. Co-chair, NSF conference on Network and Security (CanSec), October, 2017, Rolla, Missouri
7. General Conference Chair, Third International Symposium on Security in Computing and Communications (SSCC-15), August, 2015, India
8. Conference chair, 2016 the 6th International Conference on Power and Energy Systems, Paris, France.
9. Keynote speaker, National conference on Recent Advances in Embedded Technologies at JIMS, April 2015, India
10. Keynote speaker, International Conference on advance Computing and Creating Entrepreneurs (IACC), February, 2013, India
11. Keynote speaker, 9th IEEE International Conference on Heterogeneous Networking for Quality, Reliability, Security, and Robustness (Qshine) conference, January, 2013, India
12. Keynote speaker, IEEE International Advance Computing conference, February, 2013, India

13. Co-chair, International Conference on Advances in Computing, Communications and Informatics (ICACCI-2012), August 3-5, 2012, Chennai
14. Steering Committee for IEEE International Symposium on Wireless Pervasive Computing (ISWPC 2011), Hong Kong, 2011
15. Co-chair, Second IEEE International Workshop on Specialized Ad Hoc Networks and Systems (SAHNS 2010), Minneapolis, June, 2011
16. Advisory Committee, International Conference on Advanced Computing, Networking and Security (ADCONS 2011), NIT Karnataka, Surathkal
17. Advisory Committee, International Conference on High Performance and Grid Computing, 2011, Chitkara University, India
18. Advisory Committee, International Conference on Advances in Computing and Communication at NIT (Himachal)-India
19. Chair of Steering committee of IEEE Symposium on Reliable Distributed Systems (SRDS)
20. General Chair of the ACM/IET/ICST International Workshop on Performance and analysis of Wireless Networks, to be held in conjunction with The International Conference on Mobile Technology, Applications, and Systems (Mobility 2008), September, 2008, Ilan, Taiwan.
21. Co-Chair of the 2nd IEEE International Workshop on Broadband Wireless Internet Access, to be held in conjunction with the 4th IEEE International Conference on Wireless and Mobile Computing, Networking and Communications (WiMob 2008) October 12, 2008, Avignon, France
22. Co-chair of CRA-W sponsored workshop on Pervasive Computing, St Louis
23. Co-chair, First IEEE International Workshop on Specialized Ad Hoc Networks and Systems (SAHNS 2007), Toronto, Canada, June 29, 2007
24. IEEE Fellow Committee, 2004, 2005, 2006
25. PolyU's Distinguished Scholar, Hong Kong Polytechnic University 70th Anniversary
26. Keynote speaker at DEXA conference workshop, Krakow, Poland, 2006
27. Keynote speaker at International Conference on Distributed Computing and Internet Technology, Bhuvneshwar, India, 2004.
28. NSF PI workshop, Area Chair for Privacy & Trust Management, 2003 and 2004.
29. IEEE Computer Society' Technical Achievement Award Committee, 2003.
30. Invited Speaker, 14th International Workshop on Mobile Distributed Database System, Prague, September, 2003.
31. Keynote Speaker at International Conference on Advances in Computing and Communications (ADCOM), Bhuvneshwar, India, December 2001.
32. Chairman, IEEE workshop on Secure Mobile Systems, New Orleans, October 2001.
33. Keynote Speaker at Greece Database Conference, Ionina, Greece, May, 2001.
34. Invited Speaker at International Workshop on Mobility in Databases (MDDS-2000), London, September, 2000.

35. Invited Speaker at International Conference on Data Warehousing and Knowledge Discovery (DaWak-2000), London, September 2000.
36. Keynote Speaker at Database and Expert Systems (DEXA-99) conference, Florence, September 1999.
37. Chairman of 18th IEEE Symposium on Reliable Distributed Systems and Three Workshops on Multimedia, Security and Parallel and Dist. Systems, October 1998, Purdue University (156 attendees).
38. Invited Speaker at IEEE ASSET-98 Workshop, March 1998.
39. Chairman of the Steering Committee of the IEEE Symposium on Reliable Distributed Systems, 1995-1999. (Also Liaisons of the Technical Committee of Distributed Processing).
40. Keynote Speaker, Sixth International Conference on Databases and Expert Systems (DEXA-95), London, UK, September 1995.
41. Chairman of Workshop on Research Issues in Digital Libraries, in association with DEXA-95, London, September 1995.
42. Co-Chair of the NASA International Conference and Forum on Advances in Digital Libraries, Washington DC. (Jointly funded by NASA, ARPA, AT&T, BellCore and NSF), May 1995.
43. Co-Chair of the Rutgers-Purdue Workshop on Digital Libraries, Newark (jointly sponsored by funding from AT&T and BellCore), May 1994.
44. General Chair of the International Conference on Information and Knowledge Management, Gaithersburg, Maryland, November 1994.
45. Vice-chair of ISMM Conference on Parallel and Distributed Systems, Las Vegas, October 1994.
46. Program Chair of the IEEE Workshop on Parallel and Distributed Systems, Princeton, October 1993.
47. Invited Speaker in the International Conference on Intelligent and Cooperative Information Systems, Rotterdam, May 1993.
48. Tutorial Speaker in IEEE Symposium on Reliable Distributed Systems, Princeton, NJ, October 1993.
49. Program Chairman of the International Conference on Information and Knowledge Management, Washington DC, November 1993.
50. Invited Speaker, International Conference on Information and Knowledge Management, Baltimore, November 1992.
51. Co-Guest Editor of IEEE Computer (special issue on Object-Oriented Systems and Applications), October 1992.
52. Co-Program Chairman (with Nabil Adam) of the Rutgers-Purdue Workshop on Current Issues in Database Systems and Applications, Newark, October 1992.
53. Tutorial Speaker in IEEE Symposium on Reliable Distributed Systems, Houston, October 1993.
54. General Vice-Chair of the IEEE Technical Committee on Distributed Processing, January 1992-December 1993.

55. Invited Speaker at the Annual Conference of the Computer Society of India, October 1991, New Delhi, India.
56. Program Chairman of IEEE Computer Society's Workshop on Design Principles for Experimental Distributed Systems, October, 1986, Purdue University, West Lafayette. (A special issue of IEEE Transactions on Software Engineering in June, 1989 published selected papers that were presented at the workshop.)
57. Vice Chairman of Program Committee for Ninth IEEE Computer Society's Conference on Distributed Computing Systems, Newport Beach 1989. (Distributed Systems Architecture Track.)
58. American Liaison of Tenth IEEE Computer Society's Conference on Distributed Computing Systems, Paris, 1990.
59. Program Chairman of the IEEE Workshop on Experimental Distributed Systems, October 1990, Huntsville, Alabama.
60. Founding member of IEEE Data Engineering Conference Committee, 1985
61. Vice Program Chairman of IEEE Computer Society's Sixth International Conference on Distributed Computing Systems Conference, May 1986, Cambridge.
62. Vice Chairman of IEEE Computer Society's Technical Committee on Distributed Processing, (1982-1984).
63. Founder of IEEE Computer Society's Symposium on Reliability in Distributed Software and Database Systems. (Renamed Reliability in Distributed Systems). Program Chairman (July 1981), General Chairman (July 1982), and Program Committee Member (1983-1986, 1988-1989, 2004-2008) for IEEE Computer Society's Symposia on Reliability in Distributed Software and Database Systems.
64. Member of IEEE computer society Education Activity Board, (1982-1983)
65. Member of IEEE computer society Publication Board, (1981-1984)

Member

66. International Conference on SECURE CYBER COMPUTING AND COMMUNICATIONS (ICSCCC), 2018
67. 4th workshop on Secure Software Engineering to be held in conjunction with the 13th International Conference on Availability, Reliability and Security, 2018
68. Smart Cities and Connected Communities Symposium to be held in conjunction with 14th International Wireless Communications and Mobile Computing Conference (IWCMC 2018) conference, June, 2018.
69. 5th International Conference on Big Data Analysis and Data Mining, June 2018 at Rome, Italy.
70. International Conference on Innovations in Computing, December 2017
71. 2nd International Workshop on Security and Communication Networks (IWSCN 2010)
72. 29th IEEE Symposium on Reliable Distributed Systems, 2010
73. 11th IEEE International Conference on Information Reuse and Integration 2010 (IRI2010)
74. IEEE CLOUD 2010

75. 8th International Conference on Wired / Wireless Internet Communications
76. 8th ACM International Symposium on Mobility Management and Wireless Access (MobiWac 2010)
77. 8th international conference on Advances in Mobile Computing and Multimedia (MoMM2010)
78. 12th International Conference on Information Integration and Web-based Applications & Services (iiWAS2010)
79. Editor-in-chief of Global Science and Technology Forum (GSTF) International Journal on Computing (JoC)
80. ACM Middleware 2010
81. ACM MEDES'10
82. International Workshop on Advanced Information Systems for Enterprises (IWAISE'08), April, 2008, Constantine, Algeria
83. 4th International Conference on Web Information Systems and Technologies (WEBIST), May, 2008, Funchal, Madeira - Portugal
84. Third International Conference on Availability, Reliability and Security (ARES 2008 - The International Dependability Conference), March, 2008, Barcelona, Spain
85. The 7th IFIP Mediterranean AD HOC Networking Workshop (Med-Hoc-Net 2008), June 2008, Palma de Mallorca, Spain
86. IEEE 27th International Symposium on Reliable Distributed Systems October, 2008, Napoli, Italy
87. 5th International ACM Workshop on Mobile Management and Wireless Access (MobiWAC), Sydney, 2008
88. Fifth IEEE International Conference on Soft Computing as Transdisciplinary Science and Technology (CSTST'08), October, 2008, Cergy-Pontoise/Paris, FRANCE
89. The Third International Conference on Digital Information Management (ICDIM 2008), November, 2008, London, UK
90. The International Wireless Communications and Mobile Computing Conference 2008 (IWCMC 2008), Chania Crete Island, Greece, August, 2008
91. IEEE International Conference and Exhibition on Next Generation Mobile Applications, Services, and Technologies (NGMAST'08), Cardiff, Wales, UK, Sept. 2008
92. 5th International Conference on Soft Computing as Transdisciplinary Science and Technology, Paris/Cergy Pointoise, France, October, 2008
93. 6th International Conference on Wired/Wireless Internet Communications in Tampere, Finland, May, 2008
94. IADIS International Conference on Informatics, Amsterdam, Netherland, July, 2008
95. International Workshop on Sensor Network Technologies for Information Explosion Era (SeNTIE2008) in Conjunction with International Conference on Mobile Data Management (MDM 2008) April, 2008 (Beijing, China)
96. International Conference on Web and Information Technologies (ICWIT '08), June 2008, Sidi Bel Abbes, Algeria

97. International workshop of SAIM 2008 to be held in Zhangjiajie, China, July, 2008
98. Fourth International Conference On Signal-Image Technology & InternetBased Systems (SITIS' 2008), Dec 2008, Bali, Indonesia
99. The 2008 IEEE International Conference on Information Reuse and Integration (IEEE IRI-08), July, 2008, Las Vegas, USA
100. Workshop on Security and High Performance Computing Systems as part of The 2008 International Conference High Performance Computing & Simulation (HPCS-08) and in Conjunction With The 22st European Conference on Modelling and Simulation (ECMS 2008) Nicosia, Cyprus, June, 2008
101. The Second International Conference on Availability, Reliability and Security (AReS) and ARES 2007 - "The International Security and Dependability Conference" 2007, Austria
102. First International Workshop on Networking Technology for Robotics and Applications (NeTRA 2007) in conjunction with the 16th International Conference on Computer Communications and Networks (ICCCN 2007), Honolulu, Hawaii August, 2007
103. The 5th ACM International Workshop on Mobility Management and Wireless Access, Oct 2007, Crete, Greece
104. 3rd IEEE International Workshop on Wireless and Sensor Networks Security (WSNS'07), Canada, 2007
105. 3rd International Conference on Web Information Systems and Technologies, WEBIST, Barcelona, 2007
106. 3rd IEEE International Workshop on Wireless and Sensor Networks Security, Oct 2007, Pisa, Italy
107. The First International Workshop on Mobile and Ubiquitous Context Aware Systems and Applications (MUBICA 2007), In conjunction with the 4th Annual Int. Conference on Mobile and Ubiquitous Systems: Computing, Networking and Services, Aug 2007, Philadelphia
108. The Second International Conference on Digital Information Management (ICDIM'07) Oct, 2007, Lyon, France
109. 9th International Conference on Information Integration and Web Based Applications & Services, Dec 2007, Jakarta, Indonesia
110. International Conference and Exhibition on Next Generation Mobile Applications, Services, and Technologies, (NGMAST'07), UK, 2007
111. 13th IEEE Real-Time and Embedded Technology and Applications Symposium, Washington, 2007
112. Wired / Wireless Internet Communications Intranet (WWIC), Portugal, 2007
113. The Second International Conference on Scalable Information Systems (INFOSCALE), Hong Kong, 2007
114. The International Conference on Signal-Image Technology and Internet-based Systems (SITIS-2006), Tunisia, 2007
115. IEEE International Conference on Information Reuse and Integration (IEEE-IRI), Las Vegas, 2007

116. First International Workshop on Mobile and Ubiquitous Context Aware Systems and Applications (MUBICA), Philadelphia, 2007
117. International Workshop on Network Technology for Robotics and Applications (NeTRA), Hawaii, 2007
118. 5th International ACM Workshop on Mobile Management and Wireless Access (MobiWAC), Greece, 2007
119. Co-chair, The First International Workshop on Specialized Ad Hoc Networks and Systems (SAHNS), Toronto, June, 2007.
120. International Workshop on Data Intensive Sensor Networks 2007 (DISN'07) In conjunction with MDM'07, Mannheim, Germany, May, 2007
121. International Conference on Mobile Business, July 2007, Toronto Canada
122. IEEE Workshop on Data Intensive Sensor Networks (DISN-07), Germany, May 2007
123. International Conference on Mobile Business, Canada, July, 2007
124. International Workshop on Advanced Information Systems for Enterprises (IWAISE), Germany, 2007
125. DEXA workshop on Data Management in Global-scale Repositories, Germany, 2007
126. The Second International Conference on Availability, Reliability and Security (AReS) and ARES 2007 - "The International Security and Dependability Conference" 2007, Austria
127. 2nd IEEE International Workshop on Wireless and Sensor Networks Security (WSNS'06), Canada, 2006
128. 3rd International Conference on Web Information Systems and Technologies, WEBIST, Barcelona, 2007
129. International Conference and Exhibition on Next Generation Mobile Applications, Services, and Technologies, (NGMAST'07), UK, 2007
130. IASTED International Conference on Parallel and Distributed Computing and Systems (PDCS 2006) Conference, Dallas, 2006.
131. 13th IEEE Real-Time and Embedded Technology and Applications Symposium, Washington, 2007
132. Wired / Wireless Internet Communications Intranet (WWIC), Portugal, 2007
133. The Second International Conference on Scalable Information Systems (INFOSCALE), Hong Kong, 2007
134. The International Conference on Signal-Image Technology and Internet-based Systems (SITIS-2006), Tunisia, 2006
135. IEEE International Conference on Information Reuse and Integration (IEEE-IRI), Las Vegas, 2007
136. 2nd IEEE International Conference on Digital Information Management (ICDIM), France, 2007
137. First International Workshop on Mobile and Ubiquitous Context Aware Systems and Applications (MUBICA), Philadelphia, 2007

138. International Workshop on Network Technology for Robotics and Applications (NeTRA), Hawaii, 2007
139. 5th International ACM Workshop on Mobile Management and Wireless Access (MobiWAC), Greece, 2007
140. Co-chair, The First International Workshop on Specialized Ad Hoc Networks and Systems (SAHNS), Toronto, 2007.
141. IEEE Workshop on Data Intensive Sensor Networks (DISN-07), Germany, May 2007
142. International Conference on Mobile Business, Canada, July, 2007
143. International Workshop on Advanced Information Systems for Enterprises (IWAISE), Germany, 2007
144. DEXA workshop on Data Management in Global-scale Repositories, Germany, 2007
145. IADIS Virtual Multi Conference on Computer Science and Information Systems (MCCSIS), May 2006
146. IEEE International Symposium on network Computing and Applications (NCA-TNC), Cambridge, July 2006
147. International Conference on Information Security, Miami, Aug., 2006
148. First International Conference on Availability, Reliability, and Security (AReS), Vienna, April, 2006
149. IASTED International Conference on Wireless Sensor Networks (WSN), Banff, Canada, July 2006
150. Fourth International Conference on Wired/Wireless Internet Communications, Bern, May, 2006
151. Chairman of Workshop on Distributed Systems and Networks in Bern, Switzerland, May, 2006
152. To be updated later
153. Program Committee of Workshop on Mobility in Databases & Distributed Systems (MDDS-05), Copenhagen, August 2005.
154. International Workshop on Information Assurance in Distributed Systems (IADS-2005), Nanjing, November 2005.
155. Seventh International Conference on Information Integration and Web-Based Applications and Services, September 2005.
156. Security and Privacy in Communication Networks (SecureComm-2005), Greece, September 2005.
157. Second International Workshop P2P Data Management, Security and Trust (PDMST-05), Copenhagen, August 2005.
158. Fourth International Conference on Mobile Business (m-business), Sydney, July 2005.
159. International Workshop on Data Management in Global-Scale Data Repositories, Copenhagen, August 2005.
160. International Conference on Security and Privacy for Engineering Areas in Communication Networks, August 2005.

161. IEEE International Workshop on Privacy Data Management, Tokyo, April 2005. ADSN Workshop, Columbus, July 2005.
162. IEEE International Workshop on Web & Mobile Information System, Taiwan, March 2005.
163. Sixth International Conference on Information Integrations and Web-Based Applications and Services, Jakarta, September 2004.
164. Technical Program Committee of IADIS Virtual Multi Conference on Computer Science and Information Systems, 2005.
165. Technical Program Committee of Fourth Annual Mediterranean Ad Hoc Networking Workshop, Porquerolles, France, 2005.
166. Technical Program Committee of Fourth International Conference on Mobile Business, Sydney, 2005.
167. International Conference on XML Schema and Data Management, Chicago, October 2004.
168. Technical Program Committee of International Conference on Data Warehousing and Knowledge Discovery (DaWak-2004), Spain, September 2004.
169. Technical Program Committee of Third International Conference on Information Integration and Web-based Applications & Services, Linz, Austria, August 2004.
170. Technical Program Committee of the First International Workshop on Mobile Peer-to-Peer Computing, Orlando, March 2004.
171. Technical Program Committee of International Conference on Data Warehousing and Knowledge Discovery (DaWak-2003), Prague, September 2003.
172. Technical Program Committee of IIWAS International Conference on Information Integration & Web-based Applications & Services, Linz, Austria, August 2003.
173. Technical Program Committee of IEEE International Conference on Data Engineering, Bangalore, March 2003.
174. Technical Program Committee of EC-Web MDM, Berkeley, February 2003
175. Technical Program Committee of the International Conference on Mobile Database and Computing, Melbourne, February 2003.
176. IEEE Technical Achievement Awards Committee, 2003
177. Technical Program Committee of IASTED International Conference Information Systems and Databases (ISDB 2002), Tokyo, September 2002
178. Technical Program Committee of the First EurAsian Conference on Advances in Information and Communication Technology (EurAsia-ICT 2002), Shiraj, Iran, 2002
179. Technical Program Committee of the Fourth International Symposium on Multimedia Software Engineering (MSE 2002), CA, 2002.
180. Technical Program Committee of International Conference on Data Warehousing and Knowledge Discovery (DaWak-2002), Aix en Provence, September 2002.
181. Technical Program Committee of International Workshop on Mobility in Databases (MDDDB-2002), Aix en Provence, September 2002.
182. Technical Program Committee of Third International Conference on Information Integration and Web-based Applications & Services, Linz, Austria, September 2001.

183. Technical Program Committee of International Conference on Data Warehouse and Knowledge Discovery (DaWak-2001), Munich, 2001.
184. Technical Program Committee of NSF workshop on Infrastructure of Mobile and Wireless Networks, October 2001, Phoenix.
185. Technical Program Committee of IEEE Symposium on Reliable Distributed Systems, October 2001, New Orleans.
186. Technical Program Committee of International Conference on Parallel and Distributed Computing (PADS), August 2001.
187. Technical Program Committee of International Conference on Data Warehouse and Knowledge Systems, Munich, August 1999.
188. Technical Program Committee of International workshop on EC-Web, Munich, August 2001.
189. Technical Program Committee of International Conference on Database and Expert Systems, August 2000, Austria.
190. Technical Program Committee of International Workshop on Internet Data Management, September 1999, Florence Italy.
191. Technical Program Committee of International Conference on Data Warehouse and Knowledge Systems, August 1999, Florence Italy.
192. Technical Program Committee of IEEE Data Engineering Conference, March 1999.
193. Technical Program Committee of International Conference on Mobile Agents and Systems, Singapore, June 1999.
194. Technical Program Committee of International Conference on Multi-Media Systems, New Delhi, January 1998.
195. Technical Program Committee of IEEE workshop on Research Directions in Database Engineering (RIDE), Orlando, February 1998.
196. Technical Program Committee of International workshop on Mobile Computing, Vienna, August 1998.
197. Technical Program Committee of International Conference on Database and Expert Systems, August 1997 (France), and 1998 (Vienna).
198. Technical Program Committee of Electronic Commerce Conference, Berlin, June, 1998.
199. Technical Program Committee of the IEEE Conference on Mobile Computing, NY, November 1996.
200. Technical Program Committee of the IEEE High Assurance System Engineering Conference (HASE), Niagara-on-the-lake, October 1996.
201. Technical Program Committee of the Seventh International Conference on Database and Expert Systems Applications (DEXA 96), Zurich, September 1996.
202. Technical Program Committee of the Eleventh IEEE International Conference on Data Engineering, New Orleans, February 1996.
203. Technical Program Committee of the IETE International Conference on Multi-Media Information Systems, February 1996, New Delhi, India.

204. Technical Program Committee of the IEEE Conference on Future Trends of Distributed Computing Systems, Cheju Island, Korea, August 28-30, 1995.
205. Technical Program Committee of the Sixth International Conference on Information Systems and Management of Data (CISMOD 95), Bombay, India, November 1995.
206. Technical Program Committee of the Sixth IEEE Conference on Future Trends of Distributed Computing Systems, Cheju Island, Korea, August 28-30, 1995.
207. Technical Program Committee of the 5th International Conference on Information Systems and Management of Data (CISMOD 94), Madras, India, October 1994.
208. Technical Program Committee of the 14th IEEE Symposium on Reliable Distributed Systems, October 1994, Irvine, CA.
209. Technical Program Committee of the 13th IEEE Conference on Distributed Computing Systems, May 1993, Pittsburgh, PA.
210. Technical Program Committee of the 12th IEEE Symposium on Reliable Distributed Systems, October 1993, Princeton, NJ.
211. Technical Program Committee of the Fourth International Conference on Data and Knowledge Systems for Manufacturing and Engineering, May 1994, Hong Kong.
212. Technical Program Committee of the IEEE Symposium on Reliability in Distributed Systems, October 1992, Houston TX.
213. Technical Program Committee of the Third Usenix Symposium on Experiences with Building Distributed (and Multiprocessor) Systems, March 1992, Newport Beach, CA.
214. Technical Program Committee of the International Conference on Management of Data (COMAD91), December 1991, Bangalore, India.
215. Technical Program Committee of the Second Great Lakes Conference on Computer Science, October 1991, Kalamazoo, MI.
216. Technical Program Committee of the Tenth IEEE Symposium on Reliable Distributed Systems, October 1991, Italy.
217. Technical Program Committee of the Seventh IEEE Conference on Data Engineering, April 1991, Japan.
218. Technical Program Committee of the Ninth IEEE Symposium on Reliable Distributed Systems, October 1990, Huntsville, AL.
219. Technical Program Committee of the Second Usenix Association Workshop on Experiences with Building Distributed (and Multiprocessor) Systems, March 1991, Atlanta, GA.
220. Technical Program Committee of the 1990 Very Large Database (VLDB) Conference, August 1990, Australia.
221. Technical Program Committee of First IEEE International Conference on System Integration, March 1990, Morristown, NJ.
222. Technical Program Committee of the International Conference on Parallel Architectures and Databases, March 1990, Miami, FL.
223. Technical Program Committee of Second International Conference on Data and Knowledge Systems for Manufacturing and Engineering, October 1989, Gaithersburg, MD.

224. Technical Program Committee of the Usenix Association Workshop on Experiences with Building Distributed (and Multiprocessor) Systems, October, 1989, Ft. Lauderdale, FL.
225. Technical Program Committee of IEEE Computer Society's Seventh and Eighth International Conferences on Distributed Computing Systems Conference, September 1987, Berlin, W. Germany, and September 1988, San Jose, CA, respectively.
226. Panel to define research issues related to SDI and Distributed Databases, Rome Air Development Center, July 1986, Rome, NY.
227. Executive Committee of IEEE Computer Society's Technical Committee on Distributed Processing, (since January 1985).
228. Technical Program Committee for ACM SIGMOD Conference, May 1985, Austin, TX.
229. Tutorial Speaker at IEEE Computer Society's Symposium on Reliability in Distributed Software and Database Systems, October 1984, Washington, DC.
230. Technical Program Committee for IEEE Computer Society's International Conference on Database Engineering, (April 1984, February 1986-1990).
231. Technical Program Committee for IEEE International Conference on Distributed Computing Systems, October 1982, Miami.
232. IEEE Computer Society's Publication Board, (Computer Advisory Committee during 1981. Transaction Advisory Board, (during 1982).
233. IEEE Computer Society's Education Activities Board, 1981.
234. CODASYL (Conference on Data System Languages) Systems Committee (1978-1982). The report was published by ACM.

International Activities (Various Years not in chronological order)

1. Hosting Ph.D students and Undergraduate from Switzerland, India, China
2. International Conference on High Performance and Grid Computing, Chitkara University, India
3. 4th International Workshop on Dependable Network Computing and Mobile Systems (DNCMS 2010) held in conjunction with SRDS 2010, India
4. Invited speaker at International Conference on System Integration, Brasilia, November, 2008
5. Seminars in Universities of Karlstad, Stockholm, Uppsala, Pierre and Madam Curie, EPFL (2008)
6. Visiting Professor in ETH and EPFL and University of Bern in Switzerland (several summers from 1991-2006).
7. Seminars in Cambridge, ETH, Technical University of Vienna, University of Klagenfurt, HIIT, Technical University of Berlin, Humboldt University. (2006-2008)
8. Chairman of the University's International Education Committee, June 1990-June 1991.
9. Invited Speaker, Computer Society of India, DEXA conference, ICDCI conference 1991, 1995, and 1999.
10. Member of University Advisory Committee on International Programs, September 1990-June 1991.

11. Consultant to University of Indonesia, November 1988-December 1988.
12. Invited Professor at Ecole Polytechnique Federal De Lausanne (EPFL), Various years
13. Invited Professor at ETH, Zurich, June -August 1991.
14. One Day Seminar to Swiss Industry Consortium, Lausanne, 1993.
15. Invited Speaker in the International Conference on Intelligent and Cooperative Information Systems, Rotterdam, Netherlands, May 1993.
16. One Day seminar at EPFL for Industry and Academics, June 1994.
17. Invited Speaker in the International Conference on System Integration, San Paulo, Brazil, August 1994.
18. Keynote Speaker in the Sixth International Conference on Databases and Expert Systems, London, September 1995.
19. Organizer of a Workshop on Advances in Digital Libraries in the Sixth International Conference on Database and Expert Systems, London, September 1995.
20. Invited Professor, University of Klagenfurt, Austria, 1999.
21. Establishing Collaborative Program with ETH and EPFL, Switzerland, 2001.
22. Seminar in University of Bern and EPFL, 2003.
23. Keynote Speaker, International Workshop on Distributed Computing and Internet Technology, Bhubaneswar, India, 2004.
24. Keynote speaker, DEXA Workshop on Security and Privacy, Krakow, 2006
25. Tutorials on Privacy, Helsinki University and HIIT, 2006
26. Colloquia in Humboldt University and ETH, Zurich, 2007
27. PolyU's Distinguished Scholar, Hong Kong Polytechnic University 70th Anniversary
28. Hosted Ph. D students from University of Bern, Universities in Korea, and Humboldt University, 2008

TEACHING (Graduate and Undergraduate)

1. Graduate and Undergrad (Last few years)

1. CS 542: (Distributed Database Systems). Seven new projects have been created on Video Conferencing, Communications, Multi-media, Digital Libraries, and Mobile Databases, Web Caching, Internet Data Management. The course has changed to deal with distributed computing in new emerging applications and technologies. (Started in 1985 and offered many times) (Student evaluation 4.9/5.0)
2. CS 348: (Information System). I revised the course content and taught it as nuts and bolts of technologies that are needed for building information systems. This included physical and logical design of information systems, data mining, database warehouses, cooperative information systems, interoperability, and commercial systems. I brought outside speakers and arranged a visit to a local company. (Student Evaluations 4.5/5.0)
3. CS 448: (Introduction to Database Systems). Updated the course by introducing concepts of Object-Oriented, Client-Server, and multi-media databases. (Student Evaluations 4.8/5.0)

4. CS 490 (Emerging Technologies and Fundamental of Computer Science), Seminar for Minorities in non-CS majors, offered in last three semesters (Student Evaluations 4.9/5.0)
5. CS 690B: (Research Seminar on Cloud Systems for Blind and Hearing Impaired). Fall 2010, first offering.
6. CS 641: (Multimedia Database Systems). Fall, 2008 first offering. Covers topics such as Digital Libraries, Video Conferencing, Mobile MM Support (3G, 4G systems), QoS, Media Streaming
7. Seminars at other Universities and Thesis Committees: I have served on Ph.D. Committees, offered Ph.D. seminars and helped graduate students in EPFL, Lausanne, ETH, Zurich, and Rutgers University, Queens and James Cook University, South Africa, I.I.T Delhi, Humboldt University, Berlin, and University of Berlin, Germany, India

2. Tutorials at International Conferences and Institutes

8. I have organized tutorial notes on several topics (a) Configurable Distributed Database Systems: Living with Failures and Surviving Catastrophes, (b) Reliability and Performance Evaluation of Distributed Database Systems, (c) Communication Facilities for Transaction Processing, and (d) Privacy and Security
9. These have been published by IEEE and EPFL, Lausanne and have been presented to various industry groups and conference attendees.

3. Undergraduate (extra activities, Various Years)

10. Advising CS honor student (2018)
11. Independent study by eight undergraduates (in lieu of CS 490 course)
12. Hosting interns from IIT (last few summers)
13. Freshman Honors seminar.
14. Active in contacting high school students who are prospects for the freshman class of school of science and served on the awards committee. Meeting students and families of prospective freshman
15. Helping minority students in school of science (voluntarily) in Computer Science courses. Member of the School of Science Minority Affairs Committee. Member of the Horizon program to retain minorities. Member of Undergrad School of Science Research Committee.
16. CS 490 (Independent Study): Have supervised 8 undergraduate students who have mainly worked in Raid laboratory and were funded through NSF and AT&T grants. Three students currently supported by NSF REU grant.

Postdocs

1. Dr. Sanjay Madria (1998-2000)
2. Dr. Ladjel Bellatreche (2000)
3. Dr. Malika Mahoui (2000-2001)
4. Dr. I Young Chung (2001-2002)
5. Dr. Florian Baumgartner (2002)
6. Dr. Mamata Jenamani (2003-2004)

7. Dr. Leszek Lilien (2002-2006)
8. Dr. Xiaoxin Wu (2002-2005)
9. Dr. Wen Zen (2003-2004)
10. Dr. Jungho Huh (2006-2010)
11. Dr. Ruy Olivier (2007-2009)
12. Dr. Rui Jiang (2013-2015)
13. Dr. Gong Tao (2012-2014)
14. Dr. Hongsong Chen (2014-2016)

Ph.D. Students (Graduated or Passed the Qualifier Examination)

Major Advisor

1. Cecil Hua, "Verification of Concurrency Control Algorithms for Distributed Database Systems," (1979-1981). (Employed at IBM.)
2. Leszek Lilien, "Integrity in Database Systems," (1980-1983). (Faculty at Western Michigan University.)
3. Zwang Ruan, "Replication in Distributed Systems," (1984-1986) (Motorola, China)
4. John Riedl, "Formal Models and Implementation of Adaptable Distributed Systems," (from 1985-1989). (Professor at University of Minnesota.)
5. Pei-Jyun Leu, "Consistent State Detection and Recovery for Concurrent Processing," (from 1986-1988.) (Employed at Hewlett Packard Corporation.)
6. Shy Renn Lian, "Global State Detection in Distributed Systems," (from 1986-1990). (Employed at AT&T Corporation.)
7. Enrique Mafla, "Transaction Processing in Operating System Kernel," (from 1988-1990). (Professor at a University of Ecuador.)
8. Shirley Browne, "Recovery in Replicated Database Systems," (1988-1990). (Faculty at University of Tennessee.)
9. Sumi Helal, "Adaptability to failures in Distributed Systems," (1988 -1991). (Professor at University of Florida.)
10. Srinivasan Jagannathan, "Composite Object Replication in Distributed Database Systems," (from 1988-1992). (Employed at Oracle Corporation.)
11. Yin-he Jiang, "Enhancements to Relational Database Systems," (from 1990-1994). (Employed at Oracle Corporation.)
12. Yongguang Zhang, "Communications in Large Scale Distributed Systems," (from 1990-1994). (Hughes Research Laboratory.)
13. Aidong Zhang, "Maintaining Consistency in Multi-databases," (from 1993-1994). (Professor at SUNY Buffalo.)
14. Evaggelia Pitoura, "Advanced Transaction Model and Relaxed Consistency Criterion for Mobile Environments," (from 1993 -1995). (Professor at University of Ionina in Greece.)

15. Xiangning Liu, ``Experimental Study of Data Communication and Replication for Transaction Processing over Large Number of Distributed Sites,” (from 1993 -1995). (Employed in Sybase Corporation.)
16. Shunge Li, ``Experiments in Multi-media Object Oriented Systems,” (from 1993-1997). (Employed at Verizon Research Laboratories.)
17. Shalab Goel, ``Concurrency and Coherency Control in Shared Disk Parallel Database Systems,” (from 1995-2000). (Employed at IBM.)
18. Melli Annamalia, ``Context-based Retrieval in Digital Image Libraries,” (from 1993-1997). (Employed at Oracle Corporation.)
19. Sheng-Yih Wang, ``Adaptable Video-Audio Conferencing,” (from 1995-2000). (Employed at Foundry Networks.)
20. Ahsan Habib, ``Active Networks and DiffServ,” (from 2000-2003). (Employed at UC-Berkeley.)
21. Mohamed Hefeeda, ``Multimedia Streaming,” (from 2001-2004). (Employed at Simon Fraser University, Canada).
22. Yi Lu, ``Adhoc Networks,” (from 2000-2004). (Employed at Microsoft Corporation.)
23. Yuhui Zhong, `` Formalization of Trust,” (from 2001-2005). (Employed at Microsoft Corporation.)
24. Weichao Wang, ``Secure Routing in Wireless and Mobile Networks,” (from 2002-2006). (employed at Univ of North Carolina, Charlotte)
25. Gang Ding, ``Cross-layer Algorithms for Mobile Wireless Networks,” (from 2002 - 2006).(Employed at Olympus Communication Technology of America)
26. Ahmet Burak Can, ``Trust and Anonymity in Peer to Peer Systems,” (from 2004 -2007). (Faculty at Hacettepe University, Turkey.)
27. Amit Sirsat, ``Self-Configuration Algorithms for Mobile Adhoc Networks,” (from 2004 - 2008). (Employed at Yahoo)
28. Yu Zhang, ``Analysis of Port Scanning Attacks,” (from 2006-2009). (Employed at Google)
29. Nwokedi Idika, ``Security Measures” (from 2007-2010) (Employed at MIT Lincoln Lab)
30. Pelin Angin, ``Autonomous Agent-Based Mobile-Cloud Computing” (from 2009-213) (Employed at METU, Turkey)
31. Ruchith Fernando, Privacy In Social Messaging And Identity Management (from 2011-2014) (Employed at Amazon)
32. Rohit Ranchal, “Cross-Domain Data Dissemination and Policy Enforcement” (from 2010-2015) (Employed at IBM Research Laboratory)
33. Norman Ahmed, “Design, Implementation and Experiments in Moving Target Defense” (from 2010-2016) (Employed at Air Force Research Laboratory)
34. Mehdi Azarmi, “End-to-End Security in Service-oriented-architecture (from 2010-2016) (Employed in EMC Corporation)
35. Denis Ulybyshev, Privacy preserving Data Dissemination (from 2015-) Passed Prelims
36. Amber Johnson, Wearable device Security (from 2014-) Passed Qualls

37. Miguel Villarreal-Vasquez, Moving Target Defense (from 2016-) Passed Qualls
38. Ganapathy Mani, Autonomous System security (from 2016-) Passed Qualls
39. Aala Oqab Alsalem, V2V Safety and Security (from 2017-) Passed Qualls
40. Servio Ernesto Palacios Interiano, Learning based V2V (from 2017-) passed Qualls

Service

1. University Wide Committee (Various Years)

1. Senator for Purdue faculty, 2015-
2. Member of Equity and Diversity committee of Purdue Senate, 2015-
3. Member of Education and Policy committee of Purdue Senate, 2017-
4. Member of Military Education committee of Purdue Senate, 2015-
5. Member of the University International Education Committee for three years, Chairman.
6. School of Science representative for the University Advisory Committee on International Programs.
7. School of Science Committee for evaluating PRF XL grants
8. Participant in Mentor Program for minority students (Horizon) 1992- now.
9. Member Faculty of the Interdisciplinary Program on Geographical Information. Systems and Remote Sensing, 1984- now.
10. Participant in the Aviation Safety Center Planning Group, (with Ernest Agee of EAS and Warren Stevenson of EE and faculty from technology, Engineering).
11. Participant in the proposal to NSF for Multimedia Technology for Education, 1994-(with Ed Coyle of EE and faculty from Agriculture, Education schools).
12. Reviewer of Global Initiative Faculty Grants
13. Indiana Partnership for State wide Peer Review Committee on Computer Science (Coordinator Dr. Clinton Fuelling at Ball State and Prof. Phil Swain).
14. School of Science (Grievance Committee)
15. School of Science (PRF grants for Faculty review Committee)
16. School of Science (Undergraduate Research Day Committee)
17. Member of Asia Studies Program Taskforce.
18. Evaluation Committee of Lilly Foundation Awards/Proposal under the Executive Vice President's office.
19. Horizon Program (For retaining brilliant minority students).
20. GE Fellowship Evaluation Committee for Minorities and Women.
21. Distant Learning Committee of the University.
22. School of Science (Minority Affairs Committee), 1996-2003.
23. School of Science Council, 2001-2005.
24. School of Science (Minority Faculty Recruiting), 2004-2006.

25. Proposal Writing and Presentation for Regenstrief Health Care Engineering Center (RCHE) establishment

26. School of Science Area Committee for Promotions

2. Departmental Committee (Various Years)

22. Captain United Way (207)

23. Internal Advisory Board of Purdue Center for Educational & Research in Information Assurance & Security (CERIAS)

24. Chairman of Diversity Committee

25. Space Management Committee

26. Graduate Committee

27. Department Head Advisory Committee-Elected by faculty.

28. Colloquia Chairman

29. Faculty Advisor to Association of Computing Machinery (ACM)

30. Faculty Advisor to Indian Students Association

31. Awards Committee.

32. Undergraduate Committee.

33. Promotion Committee.

34. EE Liaison.

35. Industrial Affiliate Committee.

36. CS690S Seminar for New Graduate Students.

37. CS 195 Freshman Honors Seminar.

3. Others

38. West Lafayette High School (Book selection Committee).

39. Happy Hollow School (Organizer of International Night).

40. Five year review of Computer Science department, Western Michigan University, November

41. Establishing Information Assurance program at Monmouth College.

Government Service (Various Years)

1. Committee for NASA (USRA) for Evaluating Architecture of Embedded Distributed Network Systems

2. Providing Consulting Services to NIST for the Remote Data Access (RDA) protocol for integrating commercial databases over wide area networks

3. Committee for writing guidelines and specifications for Data Integration and Distribution with Mr. Bill Wong member from DISA (Defense Information Systems Architecture), Department of Defense.

4. Panel Member: National Science Foundation

5. Panel Member: NASA CAN for Public Use of Earth and Space Science Data over the Internet work
6. Reviewer of proposals from Army Research Lab, NASA
7. Invited Participant at ARPA meeting in St. Louis.
8. AFRL/Navy faculty fellow
9. Special Projects for NSF (Large projects)
10. Reviewer, US State Department (Russia program)
11. Reviewer, US Department of Transportation