Curriculum Vitae

Rajeev R. Raje

Associate Dean School of Science Professor Department of Computer and Information Science Indiana University Purdue University Indianapolis rraje@cs.iupui.edu (317)-274-5174 https://cs.iupui.edu/~rraje/

Education

Syracuse University	Ph.D. in Computer Engineering	1994
Syracuse University	M.S. in Computer Engineering	1994
University of Bombay	B.E. in Electrical Engineering	1984

Appointments

Associate Dean for Planning, Finance, and Faculty Affairs

(January 2019 – Present) School of Science Indiana University Purdue University Indianapolis (IUPUI) Indianapolis, IN

Responsibilities

- Manage fiscal, personnel (faculty and staff HR), and international collaborations functions of the school.
- Oversee the construction and management of the school's budget.
- Function as the *liaison* for all faculty-related matters including the tenure and promotion guidelines and the associated processes.
- Represent the school on the council of associate deans for faculty affairs, international representatives' group, and the India recruitment steering committee.

Accomplishments

- Assisted the current dean in appointing four chairs, an associate dean and two center directors, and reappointing two chairs.
- Devised comprehensive compensation packages, in cooperation with deans and chairs, for successful hiring of fourteen tenure track and eight non-tenure track faculty members.
- Formulated retention packages for multiple faculty and staff colleagues.
- Successfully implemented university mandated fiscal cuts, to offset the effects of the pandemic, to the school's budget *without eliminating any occupied positions* for two consecutive years.
- Developed *machine learning-based* models for fiscal predictions for the school.
- Advised deans and implemented annual faculty and staff salary raises in five budget cycles.
- Ensured a smooth transition of faculty-, HR-, IT-, and fiscal-related functions of the school during two deanship changes and the pandemic.
- Initiated and oversaw academic partnerships with multiple Indian Universities for joint academic programs and increased the number of international students by many folds.
- Currently co-leading the development of the school's new strategic plan and new degree programs.
- Created and enhanced various operating policies of the school.
- Co-shared the responsibility of the Associate Dean for Research and Graduate Education in a summer.
- Contributed to the enhancement of the promotion and tenure guidelines for incorporating diversity, equity, and inclusion-related specifics and the creation of the faculty grievances policy.
- Contributed to the development of strategies for dealing with campus' internationalization efforts during the pandemic.

Chair, Promotion and Tenure (P&T) Committee

(January 2012 – August 2019) School of Science, IUPUI

Responsibilities

• Coordinate and enforce all aspects of the P&T process of the school and ensure its integrity.

Accomplishments

- Oversaw and co-wrote, multiple times, enhancements to the school's P&T guidelines.
 - Enhancements included creating a career pathway for teaching excellence and recognizing collaborative research.
- Significantly streamlined the entire P&T process.
- Conceptualized and co-organized annual P&T workshops for tenure and non-tenure track faculty colleagues colleagues highly appreciate these workshops.
- Mentored many, including URM and women, faculty colleagues in their P&T journey.

Acting Chair

(August 2015 – December 2015) Department of Computer and Information Science, IUPUI

Responsibilities

• Oversee all academic and fiscal aspects of the department.

Accomplishments

- Efficiently managed the direct reporting of fifteen faculty and three staff members.
- Coordinated the development of the proposal for an autonomous Ph.D. program (we received approval for this program, from the Indiana Commission for Higher Education, in June'16).
- Ensured the continued growth of undergraduate and graduate programs.

Associate Chair

(September 2007 – July 2015; January 2016 – December 2018) Department of Computer and Information Science, IUPUI

Responsibilities

- Advise the Chair on all academic and fiscal aspects of the department.
- Function as Chair's proxy when needed and represent the department at the school and the campus levels.

Accomplishments

- Led the creation of the self-assessment report for the external review of the department.
- Co-created the Industrial Partnership Program.
- Chaired and served on the faculty search committees multiple times we successfully hired many colleagues including 2 assistant professors, who received NSF CAREER awards.

Graduate Program Director

(September 2006 – July 2015)

Department of Computer and Information Science, IUPUI

Responsibilities

• Oversee, grow, and ensure the quality of the graduate program in the department.

Accomplishments

- Significantly (by many folds) expanded the M.S. and Ph.D. programs.
- Coordinated the entire Ph.D. qualification process with colleagues at Purdue University.
- Initiated and nurtured efforts to create joint academic programs with international universities.
- Received approval for six new Graduate Certificates.
- Created and conducted a new student orientation event each semester.
- Conceptualized and implemented a department-specific TA orientation program.

Undergraduate Committee Chair

(August 2001– May 2002; August 2016 – December 2018) Department of Computer and Information Science, IUPUI

Responsibilities

• Oversee and ensure the quality of the undergraduate program in the department.

Accomplishments

- Incorporated multiple revisions to the undergraduate curriculum including enhancements to the capstone experience.
- Participated in efforts to create joint academic programs with international universities.
- Oversaw the development of a new concentration in computational data science for the B.S. program.

Professor

(July 2009 – Present) Department of Computer and Information Science, IUPUI

Adjunct Associate Professor (Courtesy Appointment)

(March 2004 – February 2006) Department of Computer and Information Sciences University of Alabama at Birmingham, Birmingham, AL

Associate Professor

(August 2002 – June 2009) Department of Computer and Information Science, IUPUI

Assistant Professor

(August 1996 – July 2002) Department of Computer and Information Science, IUPUI

Visiting Assistant Professor

(August 1994 – July 1996) Department of Computer and Information Science, IUPUI

Graduate Research Assistant

(September 1988 – July 1994) Department of Electrical and Computer Engineering & NY CASE Center Syracuse University, Syracuse, NY

Graduate Research Assistant

(May 1988 – August 1988) Department of Electrical Engineering University of Rhode Island, Kingston, RI

Assistant and Graduate Assistant

(September 1987 – August 1988) Administrative Computer Center University of Rhode Island, Kingston, RI

Project Engineer (June 1984 – August 1987) Controls and Automation Systems Engineering Division Siemens Limited, Mumbai (Bombay), India

Professional Memberships

- ACM (1994-present)
- IEEE (1994-present)

Honors and Awards

- *First-place winner*, as a project participant in IUPUI's entry, in the *NSF's COVID Challenge Faculty category*, 2022.
- IUPUI School of Science Service Award, 2020.
- *Keynote Talk*, 3rd International Virtual Conference on Recent Trends in Advanced Computing, 2020.
- *Plenary Talk*, International Virtual Conference on Industry 4.0, 2020.
- *Letter of Appreciation* from the US NIST, 2019.
- Best Paper Presentation Award (Session joint with my Ph.D. student), 20th IEEE ICCIT, Dhaka, Bangladesh, 2017.
- Selected for a biographic entry in the Garje Marathi book by Granthali Prakashan, 2017.
- Research Selected for an entry in the 2016 Compendium Industry-Nominated Technological Breakthroughs for NSF I/UCRCs (joint with my Ph.D. student), 2016.
- ACM Senior Member, 2014.
- IEEE Senior Member, 2014.
- *Letter of Appreciation* from the IEEE/CSI International Conference on High Performance Computing and Applications (ICHPCA), 2014.
- *Keynote Address*, 2nd International Conference on Network Infrastructure Management Systems, Mumbai, India, 2013.
- IUPUI Trustees Teaching Award, 2010 and 2001.
- Favorite Faculty Award, Computer Science Club, IUPUI, 2007-08.
- Co-author, Top-10 Downloaded Paper, ACM Digital Library, 2006.
- Nominated for the SoS Research Award, 2006.
- Co-author, One of the Top Bioinformatics papers, BRIC Bioinformatic Online Newsletter, 2005.
- *Recognition Plaque*, 12th IEEE International Conference on High-performance Computing, 2005.
- *Certificate of Appreciation*, Department of the Information Systems and Operations Management, Ball State University, 2005.
- Nominated to Who's Who Among America's Teachers, 2004.
- *Certificate of Appreciation*, ACM SAC, 2003.
- Nominated for the Forty Under 40 Program of the Indianapolis Business Journal, 2003-04.
- Certificate of Appreciation, School of Science, IUPUI, 2002.
- The IUPUI School of Science Teaching Award, 2000.
- *Plenary Speaker* Symposium on Object-oriented Distributed Computing at the 77th Annual Meeting of the Alabama Academy of Science, 2000.
- Commendation for Technical Excellence in Reviewing, Recognized by IEEE Computer, 1998-99.
- Selected as *Level-3, Level-2, and Level-1 Mentor* by the Graduating Students at IUPUI School of Science, 1996-2002 and 2004-22.
- The *Teaching Excellence Recognition Award (TERA)*, Department of Computer and Information Science and the School of Science, IUPUI, 1998-99 and 1996-97.
- *Excellence in Teaching*, Recognized by the IUPUI Intercollegiate Athletics Department, 1998-99.
- The *Professor of the Year 1996-97*, Computer Science Club and the Department of Computer and Information Science, IUPUI.

- The *Overall Professor of the Year 1995-96*, Computer Science Club and the Department of Computer and Information Science, IUPUI.
- *Graduate Assistantship*, Syracuse University, NY CASE Center and University of Rhode Island, 1988-94.
- J. N. Tata Scholarship, J. N. Tata Endowment, 1986.
- Anandrao Ganapat Pandit Scholarship for achieving the 1st Rank, University of Bombay, 1982-83.
- Shekhar N. Naik Silver Medal for Science, Indian Education Society, 1978.

Professional Development

- Attended Implicit-bias workshop conducted, at IUPUI, by the Women in Science & Engineering Leadership Institute of the University of Wisconsin-Madison, 2017.
- Attended two national deans' annual conferences organized by the Council of Colleges of Arts and Sciences, 2019, 2020.
- Participated in IUPUI's EPIC Leadership Training workshops, 2020, 2021.
- Participated in IU's LEAD sessions, 2021, 2022, 2023.
- Attended Active Shooter Training conducted by IUPUI Police Department, 2023.
- Attended IUPUI's multiple tenure and promotion workshops.

Courses Taught

- Graduate Courses: Distributed-object Computing, Object-oriented Design and Programming, Programming Languages, Operating Systems, Introduction to Distributed Computing, Advanced Distributed Computing
- Undergraduate Courses: Operating Systems, Exploration in Computing, High Performance Computing, Programming Languages, Systems Programming, Advanced Programming, Computing I, Computing II, Problem Solving Using C++

Recent Teaching Assignments

- Programming Languages (CSCI 56500 Fall'18; Fall'21; Fall'23)
- Introduction to Distributed Computing (CSCI 53700 Fall'18; Fall'19; Fall'22)
- Advanced Distributed Computing (CSCI 60300 Spr'18)

Student Supervision/Mentoring

- Post-doctoral: Ruchika Malhotra
- Ph.D.: Nahida Chowdhury, Lahiru Gallege, Dimuthu Gamage, Ryan Rybarczyk, Fei Cao (joint-UAB), Wei Zhao (joint-UAB), Alex Liu (joint-UAB), Vaishali Rajput (joint-SIT).
- M.S.: Sivakumar Chinnasamy, Mingyong Qiao, Nanditha Nayani, Girish Brahnmath, Zhisheng Huang, Changlin Sun, Natasha Gupta, Praveen Gopalkrishna, Pradeep Mysore, Anjali Kumari, Barun Devaraju, Alex Crespi, Srikanth Reddy, Zhun Li, Liying Tang, William Higdon, Robert Berbeco, Kalpana Tummala, Jayasree Gandhamaneni, Padma Kambhapati (joint), Ravi Bulusu, Richard Neidermyer, Pratibha Katuri, Omkar Tilak, Amruta Jejurikar, Girish Joshi, Sucheta Phatak, Neha Talavdekar, Ketaki Pradhan, Ryan Rybarczyk, Aboli Phadke, Allenoush Hayrapetian, Pradeep Gowda, Rajesh Kumar, Amrita Mangaonkar, Abhinandan Jayanth (joint), Zachary Reynolds (joint), Ashish Chaturvedi (joint), Apeksha Jangam (joint), Vishwesh Janardhana (joint), Saurabh Pandey, Rohit Pawar, Ayush Maharjan, Umesh Raja, Aanchal Rohira, Ankkit Sinha, Medha Kulkarni, Pranjali Shimpi, Aarya Deshmukh, Hassam Khan.

- Ph.D./M.S. Thesis/Project Committee Membership: Feng Li, Wei Lin, Nyalia Lui, Samira Khorshidi, Brandon Upp, Anushka Patil, Enas Alikhashashneh, Ping Zhang, Raja Dheekonda, Arvind Nair, Salman Haider, Harold Owens, Weijian Zhang, Yuankun Fu, Savitha Baskaran, Geetha Satyanarayana, Hareesh Sandupatla, Mike Du, Sricharan Lochan, Lakshmi Velicheti, Shalini Ravishankar, Jeff Kriske, Mohammed Rangwala, Newlyn Erratt, Serena Gong, Tanumoy Pati, Venkatesh Bharadwaj, Mohit Sachan, Darshan Puranik, Omkar Tilak, Manjula Peiris, Harold Owens, Ashhar Madni, Xiang Ran, Yogesh Karandikar, Nikesh Patel, Kumar Abhishek, Joby Varghese, Shengquan Peng, Mathew Stephens, Michael Boyles, Srinivasan Sikkupparbathyam, Peng Zhang, Patrick Kennedy, Anthony Wagner, Wilfred Mascarenhas, Ming Zhong, Chih-feng Lin.
- B.S.: Michael Boyles, Nila Patel, Joseph Williams, Muris Ridzal, James Freeman, Joseph Hansome, Ravi Patel, Zachary Reynolds (joint), Sujana Oruganti (joint), Trey Tebbe.

Research Interests

Quality-aware and Trusted Distributed Systems, Software Engineering, Service-oriented Computing, Faculty Affairs, and Higher-ed Administration.

Grants (External and Internal – PI and Co-PI – total funding \$6.7M+)

- 1. RealCV: Building a Better CV through AI Skill Translation, Indiana University, \$25,000, 2022-24 (Co-PI)
- 2. RealCV: Making the Invisible Visible, Indiana University, \$23,311, 2020-22 (Co-PI)
- 3. Real-Time Algorithms and Software Systems for Heterogeneous Data Driven Policing of Social Harm, NSF, \$791,513, 2017-22 (Co-PI)
- Static Code Analysis Tool Modernization Project, Kestrel Technology and DHS, \$49,340, 2016-18 (Co-PI)
- 5. Reducing False Positive Reported by Static Code Analysis Tools, Department of Homeland Security, \$580,458, 2015-20 (Co-PI)
- 6. Testing-as-a-Service: Static Code Analysis (SCA) Tool Study Phases I-IV, *S*²*ERC*, Lockheed Martin, Northrop Grumman, and Department of Homeland Security, \$111,541, 2013-16 (Co-PI)
- 7. Grant for hosting 2015 *S*²*ERC* Fall Showcase, IUPUI, \$3,500, 2015 (PI)
- 8. A Pervasive Computing Infrastructure for Supporting CS Graduate Courses, IUPUI SoS Teaching Support, \$27,657, 2014-15 (Joint PI)
- 9. Modeling, Specifying, Discovering, and Integrating Trust into Distributed Real-time and Embedded (DRE) Systems, *S*²*ERC* and Air Force Research Lab, \$79,000, 2011-13 (PI)
- 10. A Distributed Framework for Indoor Location Tracking, Purdue Research Foundation Research Grant, \$17,608, 2013-14 (Joint PI)
- 11. International Travel Grant, Purdue Research Foundation, \$1,000, 2011
- 12. Developing a Fast and Accurate Parallel Solver for Multi-scale Biochemical Reacting Systems, IUPUI, \$2000, 2009-10 (Co-PI)
- 13. Developing Fast and Accurate Embarrassingly Parallel Solver for Multi-Scale Chemically Reacting Systems, IUPUI, \$1500, 2008-09 (Co-PI)
- 14. Signature Center for Bio-Computing, IUPUI, \$285,000, 2007-2009 (Co-PI)
- 15. An Environment for Distributed Component-based Software Development, Indigo Foundation, \$26,400, 2005-2006 (PI)
- 16. A Framework for Seamless Interoperation of Heterogeneous Distributed Software Components, US Office of Naval Research, \$1,558,803, 2001-2005 (PI)
- 17. Indiana University SUR Proposal: Information Technology Applications for the Life Sciences, IBM Corporation, \$1.2 Million (hardware), 2001 (Co-PI)

- 18. Test-assessment and Minimization for the Microsoft Windows NT Operating System, Microsoft Corporation, \$93,742, 2000-2002 (PI)
- 19. An Active, Personalized, Adaptive, Multi-format Biological Information Delivery System, National Science Foundation, \$494,297, 2000-2004 (Co-PI)
- 20. Indiana University SUR Proposal: Tightly integrated distributed supercomputing the Indiana TeraCloud, IBM Corporation, \$1 Million (hardware), 2000-2001 (Co-PI)
- 21. A Distributed Information Filtering System for Digital Libraries, National Science Foundation, \$315,386, 1999-2003 (Co-PI)
- 22. Intelligent Software System for Bimolecular Database Access and Analysis, Eli Lilly & Company, \$22,200, 1999-2000 (Co-PI)
- 23. Biomedical Tele-Visualization, Indiana University High Performance Network Applications Program, \$20,000, 1999-2000 (Co-PI)
- 24. Grants-in-Aid (Teaching), Faculty Development Office at IUPUI, \$3,000, 1996-1997 (PI)

Publications

Books

- 1. Yuanshun Dai, Yi Pan, Rajeev R. Raje (Eds.), Advanced Parallel and Distributed Computing: Evaluation, Improvement and Practice, Nova Science Publishers, Inc., ISBN: 1-60021202-6, 2007.
- 2. Rajeev R. Raje, Farookh Hussain, R. Jagadeesh Kannan (Eds.), Artificial Intelligence and Technologies, Select Proceedings of ICRTAC-AIT 2020, Lecture Notes in Electrical Engineering, Springer Verlag, Singapore, ISBN: 9789811664472, 2021.

Refereed Book Chapters

- 1. Rajeev R. Raje, Zhiqing Liu, Sivakumar Chinnasamy, Ming Zhong, Wilfred Mascarenhas, Joseph Williams, "Distributed-Object Computing", in *High-performance Cluster Computing*, Vol.2, Pages: 249-273, 1999.
- 2. Rajeev R. Raje, Anantharaman Kalyanraman, Nanditha Nayani, "Distributed-Object Computing Tools", *Tools and Environments for Parallel and Distributed Computing*", pp. 79-147, 2004.
- 3. Andrew M. Olson, Rajeev R. Raje, Barrett R. Bryant, Mikhail Auguston, Carol Burt, "UniFrame A Unified Framework for Developing Service-oriented, Component-based Distributed Software Systems", in *Service-Oriented Software System Engineering: Challenges and Practices*, pp. 68-87, 2005.
- 4. Andrew M. Olson, Rajeev R. Raje, Barrett R. Bryant, Mikhail Auguston, Carol Burt, "UniFrame -Automating the Construction of Large-Scale Distributed Systems", in *Advanced Parallel and Distributed Computing: Evaluation, Improvement and Practice*, pp. 197-212, 2007.
- 5. Rajeev R. Raje, Jayasree Gandhamaneni, Andrew M. Olson, Barrett R. Bryant, "MURDS: A Mobile-Agent-based Distributed Discovery System", *Encyclopedia of Mobile Computing and Commerce* – *Volume 1*, pp. 436-441, 2007.
- 6. Mihran Tuceryan, Rajeev R. Raje, "Distributed Heterogeneous Tracking for Augmented Reality Using Component-based Software Technologies", *Encyclopedia of Mobile Computing and Commerce Volume 2*, pp. 207-212, 2007.
- 7. Rajeev R. Raje, Sivakumar Chinnasamy, Andrew Olson, William Higdon, "The Application and Enhancement of LePUS for Specifying Design Patterns" in *Design Patterns Formalization Techniques*, pp. 236-257, 2007.
- 8. Rajeev R. Raje, Alex Crespi, Omkar J. Tilak, Andrew Olson, "An Access Control Model for the Components in a Distributed System" in *Handbook of Research on Information Assurance and Security*, pp. 254-265, 2008.
- 9. Omkar Tilak, Rajeev R. Raje, Andrew Olson, "Assurance for Temporal Compatibility Using Contracts" in *Handbook of Research on Information Assurance and Security*, pp. 360-371, 2008.

10. Preeti Mulay, Rahul Joshi, Ayushi Misra, Rajeev R. Raje, "Detection of Personality Traits of Sarcastic People (PTSP): a Social-IoT based approach", in *IoT and Big Data Analytics for Smart Generation*, Intelligent Systems Reference Library, vol 154, pp. 237-261, Springer, 2018/2019.

Journal Articles

- 1. Rajeev R. Raje, "SIMATIC S5-110S DIMOS Diagnostics and Monitoring System", *Siemens Circuit*, Vol. XXII, 1-2/87 (January/April 1987), pp. 34-37.
- Rajeev R. Raje, Joseph Williams, Michael Boyles, "An Asynchronous Remote Method Invocation (ARMI) Mechanism for Java", *Concurrency: Practice and Experience*, Vol. 9(11), pp. 1207-1211 (1997).
- 3. Rajeev R. Raje, Snehasis Mukhopadhyay, Michael Boyles, Artur Papiez, Nila Patel, Mathew Palakal, Javed Mostafa, "A Bidding Mechanism for Web-Based Agents Involved in Information Classification", *World Wide Web*, 1(1998), pp. 155-165.
- 4. Rajeev Raje, Michael Boyles, Shiaofen Fang, "CEV: Collaborative Environment for Visualization Using Java-RMI", *Concurrency: Practice and Experience*, Vol. 10(11-13), pp. 1079-1085, (1998).
- 5. Rajeev R. Raje, Snehasis Mukhopadhyay, Michael Boyles, Nila Patel, Javed Mostafa, "On Designing and Implementing a Collaborative System Using the Distributed-Object Model of Java-RMI", *Parallel and Distributed Computing Practices*, Vol. 1, No. 4, December 1998, pp. 3-13.
- 6. Rajeev R. Raje, Sivakumar Chinnasamy, "Designing a Distributed-object Computing Environment for Global-scale Systems Challenges and Issues", (Invited) *ACM SIGAPP Applied Computing Review*, Vol. 7, No.1, pp. 25-30, Spring 1999.
- 7. Rajeev R. Raje, "Experiences in building Distributed-object Systems", (Invited) *Journal of Alabama Academy of Sciences*, Vol. 71, No. 2, pp. 57, April 2000.
- 8. Rajeev R. Raje, Ming Zhong, Tongyu Wang, Joseph Williams, "A Case Study: A Distributed Concurrent System with AspectJ", *ACM SIGAPP Applied Computing Review*, Vol. 9, No. 2, pp. 17-23, Summer 2001.
- 9. Rajeev R. Raje, Barrett Bryant, Mikhail Auguston, Andrew Olson, Carol Burt, "A QoS-based Framework for Creating Distributed and Heterogeneous Software Components", *Concurrency and Computation: Practice and Experience*:2002, 14, pp. 1009-1034.
- Rajeev R. Raje, Mingyong Qiao, Snehasis Mukhopadhyay, Shengquan Peng, Mathew Palakal, Javed Mostafa, "Homogeneous Agent-based Distributed Information Filtering", *Cluster Computing*, Vol. 5 (2002), No. 4, pp. 377-388.
- Mathew Palakal, Snehasis Mukhopadhyay, Javed Mostafa, Rajeev Raje, Mathias N'Cho, Santosh K. Mishra, "An Intelligent Biological Information Management System", *Bioinformatics Journal*, Vol. 18, No. 10, pp. 1283-1288, 2002.
- 12. Snehasis Mukhopadhyay, Shengquan Peng, Rajeev R. Raje, Mathew Palakal, Javed Mostafa, "Largescale Multi-agent Information Classification Using Dynamic Acquaintance Lists", *Journal of the American Society for Information Science and Technology*, Vol. 54, No. 10, pp. 966-975, 2003.
- 13. Mathew Palakal, Matthew Stephens, Snehasis Mukhopadhyay, Rajeev Raje, Simon Rhodes, "Identification of Biological Relationships from text documents using efficient computational Methods", *Journal of Bioinformatics and Computational Biology (JBCB)*, Vol. 1, No. 2 (2003), pp. 1-34.
- 14. Rajeev R. Raje, Daocheng Zhu, Snehasis Mukhopadhyay, Liying Tang, Mathew Palakal, Javed Mostafa, "COBioSIFTER A CORBA-based Distributed Multi Agent Biological Information Management System", *Cluster Computing*, Vol. 7, 373-389, 2004.
- 15. Chunmin Yang, Barrett R. Bryant, Carol Burt, Rajeev R. Raje, Andrew M. Olson, Mikhail Auguston, "Formal Methods for Quality-of-Service Analysis in Component-based Distributed Computing", *Journal of Design & Process Science: Transactions of the Society for Design and Process Science*, 8,2, pp. 137-149, 2004.

- Fei Cao, Barrett Bryant, Rajeev R. Raje, Andrew Olson, Mikhail Auguston, Wei Zhao, Carol Burt, "A Component Assembly Approach Based on Aspect-oriented Generative Domain Modeling", *Electronic Notes in Theoretical Computer Science (ENTCS)*, Elsevier Science, Vol. 114, pp. 119-136, 2005.
- 17. Snehasis Mukhopadhyay, Shengquan Peng, Rajeev R. Raje, Mathew Palakal, Javed Mostafa, "Distributed Multi-Agent Information Filtering – A Comparative Study", *Journal of the American Society for Information Science and Technology*, Vol. 56, No. 8, pp. 834-842, 2005.
- 18. Fei Cao, Barrett Bryant, Rajeev R. Raje, Andrew Olson, Mikhail Auguston, Wei Zhao, Carol Burt, "Dynamic Composition Patterns for Distributed Components", *Journal of Universal Computer Science*, Vol. 11, No. 10, pp. 1645-1675, 2005.
- 19. Changlin Sun, Rajeev R. Raje, Barrett Bryant, Omkar Tilak, "Compositional Reasoning of Performance in Component-Based Distributed Systems", *Cluster Computing*, 11(4), pp. 331-340, 2008.
- Ketaki A. Pradhan, Lahiru Gallege, Alfredo Moreno, Rajeev R. Raje, "MDE-URDS A Mobile Device Enabled Service Discovery System" (extended version of the conference paper), *International Journal on Advanced Computing and Communication Networks*, Vol. 3, No. 1 (2011), pp. 33-37, 2011.
- 21. Anjali Kumari, Ketaki A. Pradhan, Lahiru S. Gallege, Rajeev R. Raje, "Synchronization Level Specification and Matching of Software Components", *Software Engineering: An International Journal*, Vol. 2, No. 1, pp. 7-19, March 2012.
- 22. Dimuthu U. Gamage, Ryan Rybarczyk, Rajeev R. Raje, "A Practical Approach to Adaptive Service Composition", *Software Engineering: An International Journal*, Vol. 3, No.1, pp. 7-20, April 2013.
- 23. Andrew Olson, Rajeev Raje, Barun Devaraju, Lahiru Gallege, "Learning Improves Service Discovery", *Concurrency and Computation: Practice and Experience*, 27(7): 1679-1694 27(7): 1679-1694, 2015.
- 24. Lahiru Gallege, Dimuthu Gamage, James Hill, Rajeev R. Raje, "Understanding the Trust of Softwareintensive Distributed Systems", *Concurrency and Computation: Practice and Experience*, 28(1): 114-143, 2016.
- 25. Dimuthu Gamage, Lahiru Gallege, Rajeev R. Raje, "Composing Context-Aware Distributed Systems using QoS and Trust Principles", *International Journal of Services Computing*, 4(2), pp. 32-48, 2016.
- 26. Ruchika Malhotra, Megha Khanna, Rajeev R. Raje, "On the Application of Search-based Techniques for Software Engineering Predictive Modeling: A Systematic Review and Future Directions", *Swarm and Evolutionary Computation*, 32:85-109, 2017.
- 27. Boakye Dankwa, Raghavendran Vijayan, Darsh Sanghavi, Mihran Tuceryan, Rajeev R. Raje, "Trust in Vehicle-to-Vehicle Communication", *International Journal of Scientific & Engineering Research* (extended version of the conference paper), Volume 8, Issue 6, pp. 1-6, June 2017.
- 28. George Mohler, Jeremy Carter, Rajeev Raje, "Improving Social Harm Indices with a Modulated Hawkes Process", International Journal of Forecasting, Volume 34, Issue 3, pp. 431-439, July September 2018.
- 29. Jeremy Carter, George Mohler, Rajeev Raje, Nahida Chowdhury, Saurabh Pandey, "The Indianapolis Harmspot Policing Experiment", Journal of Criminal Justice, Volume 74, May June 2021, 101814.
- 30. Amrita Mangaonkar, Rohit Pawar, Nahida Chowdhury, Rajeev R. Raje, "Enhancing Collaborative Detection of Cyberbullying Behavior in Twitter Data", *Cluster Computing*, Volume 25, Issue 2, pp. 1263-1277, April 2022 (Online January 2022).
- 31. Ayush Maharjan, Nahida Sultana Chowdhury, Rajeev R. Raje, "Evaluation of Static Analysis Tools for Mobile App Security", *Acta Scientific Computer Sciences*, Volume 4 Issue 2: 37-43, January 2022.
- 32. Vaishali Rajput, Preeti Mulay, Rajeev Raje, "Blood Pressure Estimation from Speech Recordings: Exploring the Role of Voice-over Artists", International Journal on Recent and Innovation Trends in Computing and Communication (Accepted), 2023.

Refereed Conference/Workshop Proceedings

(Note: Papers published in such peer-reviewed proceedings are full papers and not abstracts and are revised based on reviewers' feedback before appearing in their final publication forms.)

- 1. Daniel J. Pease, Rajeev R. Raje, "SHARADA A Sharable HierARchical Architectural Database", *Proceedings of International Conference on Advances in Data Management*, Bombay, India, 1991.
- 2. Rajeev R. Raje, Daniel J. Pease, Zaide Liu, Neng T. Lin, "A Graphical Tool for Shared Data Analysis of Parallel Fortran Programs", *Proceedings of European Simulation Symposium*, Delft, The Netherlands, 1993.
- 3. Rajeev R. Raje, Daniel J. Pease, Songqing Cai, Zaide Liu, Neng T. Lin, "MVSW A Batch Job Submission Environment under AIX", *Proceedings of USING'93*, Atlanta, Georgia, 1993.
- 4. Rajeev R. Raje, Daniel J. Pease, Sanjay D. Jejurikar, Neng T. Lin, "A Graphical Hierarchical Flowchart Generator for Parallel Fortran Programs", *Proceedings of Computer Graphics International '93*, Lausanne, Switzerland, 1993.
- 5. Rajeev R. Raje, Daniel J. Pease, Edward T. Guy III, "Class Partitions A New Approach to Sequential Object-Oriented Programs", *Proceedings of 29th Hawaii International Conference on System Sciences (Organized by IEEE)*, Hawaii, 1996.
- 6. Rajeev R. Raje, Daniel J. Pease, Edward T. Guy III, "OFFERS A Tool for Hierarchical Implicit Analysis of Sequential Object-Oriented Programs", *Proceedings of ACM's Symposium on Applied Computing*, Philadelphia, Pennsylvania, 1996.
- 7. Rajeev R. Raje, Ramana Pidaparti, C. Yokomoto, "An Active Collaborative Environment for Engineering Applications/Education Using Java-RMI", *Proceedings of ASEE Illinois/Indiana Sectional Conference*, Indianapolis, Indiana, 1997.
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- 6. Rajeev R. Raje, Andrew Olson, Barrett Bryant, Mikhail Auguston, Carol Burt, "UniFrame", *SERC Spring and Fall showcases*, 2003.
- 7. Pradeep Mysore, Rajeev R. Raje, Barrett Bryant, Purushotham Bangalore, "GridFrame", ACM *SIGSOFT'04*, 2004.

- 8. Rajeev R. Raje, Amruta Jejurikar, Saurabh Agrawal, Pratibha Katuri, Andrew Olson, "Experimenting with Multi-level Matching of Software Components", *SERC Fall showcase*, 2006.
- 9. Subir K. Chakrabarti, Rajeev R. Raje, "Cloud Computing, Information Flow and Markets", NSF PI Meeting: The Science of Cloud, Arlington, VA, 2011.
- Lahiru Gallege, Dimuthu Gamage, James Hill, Rajeev Raje, "Modeling, Specifying, Discovering, and Integrating Trust into Distributed Real-time and Embedded (DRE) Systems" S²ERC Showcase, Ames, IA, November 2011; Arlington, VA, May 2012; Muncie, IN; November 2012 and Chicago, IL, May 2013.
- 11. Ryan Rybarczyk, Rajeev R. Raje, Mihran Tuceryan, "e-DOT: An Indoor Distributed Tracking System", S²ERC Showcase, Ames, IA, November 2011, and Arlington, VA, May 2012.
- 12. Arjan Durresi, Rajeev R. Raje, "Trustworthy Cloud Computing using an Adaptive Architecture", S²ERC Showcase, Muncie, IN, November 2012.
- 13. James Hill, Rajeev R. Raje, "A Configurable Programming and Execution Model for Multicore Architectures", S²ERC Showcase, Muncie, IN, November 2012.
- James Hill, Rajeev R. Raje, "Testing-as-a- Service: Static Code Analysis (SCA) Tool Study", S²ERC Showcase, Muncie, IN, November 2012.
- 15. Lahiru S. Gallege, Dimuthu U. Gamage, James H. Hill, Rajeev R. Raje, "Trusted Service Representation and Selection for Generating Distributed Real-time and Embedded (DRE) Systems", IUPUI Research Day, 2012.
- 16. Sonali Sharma, Rajeev R. Raje, "A Framework for Creating Adaptive Software Services and Distributed Systems", S²ERC Showcase, Muncie, IN, November 2012.
- 17. Dimuthu U. Gamage, Lahiru S. Gallege, James H. Hill, Rajeev R. Raje, "Trusted Service Composition for Distributed Real-Time and Embedded (DRE) Systems", IUPUI Research Day, 2012.
- 18. Ryan Rybarczyk, Rajeev R. Raje, Mihran Tuceryan, "e-DOTS: An Indoor Tracking Solution", IUPUI Research Day, 2012 and 2013.
- 19. Lakshmi Manohar Rao Velicheti, Dennis C. Feiock, Rajeev R. Raje, James H. Hill, "Qualitative and Quantitative Evaluation of Static Code Analysis Tools", IUPUI Research Day, 2013.
- 20. Ryan Rybarczyk, Rajeev R. Raje, Mihran Tuceryan, "Opportunistic Indoor Tracking", IUPUI Innovation to Enterprise Showcase & Forum, 2013.
- Lakshmi Manohar Rao Velicheti, Dennis C. Feiock, Rajeev R. Raje, James H. Hill, "Testing as-a-Service: Static Code Analysis (SCA) Tool Study", S²ERC Showcase, Chicago, IL, May 2013 Pensacola, FL, November 2013, Washington DC, May 2014, and Muncie, IN November 2014.
- Lahiru Gallege, Dimuthu Gamage, James Hill, Rajeev Raje, "A Holistic Approach to Software Reuse" S²ERC Showcase, Pensacola, FL, November 2013.
- Allenoush Hayrapetian, Lahiru Gallege, James Hill, Rajeev Raje, "A Narrative-based Approach to Requirement Analysis", S²ERC Showcase, Washington DC, May 2014.
- 24. Ruchika Malhotra, James Hill, Rajeev Raje, "Development of a Defect Prediction System using Machine Learning Techniques" S²ERC Showcase, Muncie, IN, November 2014.
- 25. Amrita Mangaonkar, Allenoush Hayrapetian, Rajeev Raje, "Detection of Cyberbullying in Twitter Data using Collaborative Approaches" S²ERC Showcase, Muncie, IN, November 2014.
- 26. Allenoush Hayrapetian, Ruchika Malhotra, Rajeev Raje, "Analyzing and Evaluating Security Features in Software Requirements", S²ERC Showcase, Roanoke, VA, May 2015.
- 27. Rajeev Raje, Dimuthu Gamage, "Quantifying, Assessing and Composing Trust in IoT", S²ERC Showcase, Indianapolis, IN, November 2015.
- 28. Xia Ning, Rajeev Raje, "Ranking and Recommending Secure Services", S²ERC Showcase, Indianapolis, IN, November 2015.
- 29. Rajeev Raje, Lahiru Gallege, Ryan Rybarczyk, "Summarizing and Interpreting Semi-structured Data Over Long-term Using Evidence", S²ERC Showcase, Muncie, IN, May 2016.
- Rajeev Raje, Ryan Rybarczyk, Xia Ning, Nahida Chowdhury, "Collecting and Analyzing Internal Evidence of Software Services via Model Checking", S²ERC Showcase, Washington DC, May 2017.

- 31. Nahida Chowdhury, Rajeev Raje, "TRR: Trust-based Mobile apps selection and ordering over traditional feedback mechanism", Research Day, IUPUI, Indianapolis, IN, April 2018.
- 32. Saurabh Pandey, Nahida Chowdhury, Milan Patil, Rajeev Raje, George Mohler, Jeremy Carter, "W-CDASH: A Service-based Decentralized Prediction System of Social Harm Events", Research Day, IUPUI, Indianapolis, IN, April 2018.
- 33. Nahida Chowdhury, Rajeev R. Raje, "A Comprehensive Ranking Scheme for Apps", Grad Cohort for Women 2019, CRA-W, Chicago, IL, April 2019.

Abstracts

- 1. Michael Boyles, Nila Patel, Snehasis Mukhopadhyay, Rajeev Raje, "A Collaborative Approach to Information Filtering", *Proceedings of Argonne Symposium for Undergraduates*, pp: 33, 1996.
- 2. Michael Boyles, Nila Patel, Snehasis Mukhopadhyay, Rajeev Raje, "A Distributed Environment for Collaborative Information Filtering", *Proceedings of Second Indiana University Undergraduate Research Conference*, 1996.
- 3. Michael Boyles, Nila Patel, Snehasis Mukhopadhyay, Rajeev Raje, "The Effects of a "Timeout" Period for a Distributed Information Filtering System", *Proceedings of Butler University Undergraduate Research Conference*, pp: 38, 1997.

Technical Reports

- 1. Rajeev R. Raje, Daniel J. Pease, "A Class Algebra A New Approach to Class Analysis", NY CASE Center, No. 9309, 1993.
- 2. Sivakumar Chinnasamy, Yi Dai, Rajeev R. Raje, "Formalization of Design Pattern Specifications: A Survey", CIS Technical Report, IUPUI, TR-CIS-0799-14, 1999.
- 3. Girish Brahnmath, Rajeev R. Raje, Andrew Olson, Changlin Sun, "Quality of Service Catalog for Software Components", CIS Technical Report (TR-CIS-0219-01), IUPUI, 2001.
- 4. Carol Burt, Barrett R. Bryant, Rajeev R. Raje, Andrew Olson, Mikhail Auguston, "Analysis of Distributed Component Architectures Standards and the QOS standards Needed to Progress Unification", CIS Technical Report (CIS-TR-2001-11), University of Alabama Birmingham, 2001.

Faculty Mentor for Stand-alone Student Publications

- 1. Joseph Williams, "An Implicit Object-Oriented Programming Environment Based on OFFERS" Proceedings of First Indiana University Undergraduate Research Conference, 1995.
- 2. Sivakumar Chinnasamy, "Analysis of Design Patterns", *IUPUI School of Science Graduate Research Symposium*, 1999.
- 3. Lahiru Gallege, "TruSSCom: Proposal for Trustworthy Service Representation, Selection and Negotiation for Integrating Software Systems", *ACM SPLASH Doctoral Symposium*, 2013.
- 4. Ryan Rybarczyk, "Proposal for Managing Sensor Selection Through the Integration of Trust for Indoor Tracking Systems", *IEEE PerCom Doctoral Symposium*, 2015 *Won the IEEE TCPP Best Poster and Presentation Award* (\$1000)

Presentations

Tutorials

- 1. "Distributed-Object Computing An Overview of Java-RMI and CORBA" At the 5th International Conference on Advanced Computing, organized in-cooperation with IEEE Computer Society, ADCOMP'97, December 1997.
- 2. "Multi-agent Systems" In the Spring Meeting of the Institute for Operation Research and the Management Sciences (INFORMS) Computing Society, May 2000.

Invited Talks

(This list does not include paper presentations delivered at conferences and workshops.)

- 1. "The applications of VISRAM/DIMOS to Industrial Automation", Industrial Workshop in Siemens Limited, Bombay, India, June 1987.
- 2. "Object-Flow A Symbiosis of Object-Oriented Design and Data-Flow Analysis", Minnowbrook Workshop on *Software Engineering for Parallel Computing*, New York, August 1992.
- 3. "Can Object-Oriented Design and Data-Flow Computation Complement Each Other Well?", At Victoria Jubilee Technical Institute, Bombay, India, September 1992.
- 4. "Object-Oriented Program Partitions", United Technologies Research Center, Hartford, Connecticut, January 1994.
- 5. "A Boolean Algebra of Classes", Tektronix Laboratories, Hillsboro, Oregon, February 1994.
- "Object-Flow A Symbiosis of Object-Oriented Design and Data-Flow Analysis", Department of Computer and Information Science, Indiana University-Purdue University Indianapolis, Indianapolis, IN, May 1994.
- 7. "HPJava A Solution to Meta-Challenges", Department of Computer and Information Science, Indiana University-Purdue University Indianapolis, Indianapolis, IN, April 1996.
- "Computer Science What is it Exactly?", To Ben Davis High School Students, Indianapolis, IN, May 1996.
- 9. "Collaborative Visualization", Partners of IU's Virtual Reality Initiative, Indianapolis, IN, May 1997.
- 10. "Principles of Distributed-Object Computing and their relation to PLC Programming", Concept Engineers Incorporated, Mumbai, India, December 1997.
- 11. "Experiences with the Java-RMI Paradigm for Distributed Computing" Software Technology Committee of the Indiana Business Modernization & Technology Corporation, Indianapolis, IN, March 1998.
- 12. "Experiments with Distributed-Object Systems", At Delco Electronics Incorporated, Kokomo, IN, April 1998.
- 13. "Knowledge Sharing and Collaboration: Applications in Bioinformatics Research, (joint), Eli Lilly & Company, Indianapolis, IN, September 1998.
- 14. "Distributed-object Computing using Java-RMI", 1998 Indianapolis Client/Server and Internet Developer's Conference, Indianapolis, IN, October 1998.
- 15. "Distributed Computing with Java-RMI", Indianapolis Java User's Group, Indianapolis, IN, May 1999.
- 16. "Distributed Software Systems Development, Testing and Reliability" (joint), at Microsoft Corporation, Redmond, WA, June 1999.
- 17. "Knowledge Sharing and Collaboration: Applications in Bioinformatics Research", Software Technology Committee of the Indiana Business Modernization & Technology Corporation, Indianapolis, IN, September 1999.
- 18. "An Intelligent Information Filtering System for Digital Libraries", (joint), NSF Digital Libraries Initiative All-Projects Meeting, Ithaca, NY, October 1999.
- 19. "On Designing a Multi-Agent System for Distributed Information Filtering", Fall 1999 Meeting of the Institute for Operation Research and the Management Sciences Computing Society, Philadelphia, PA, November 1999.
- 20. "UMM: Unified Meta-object Model and Global Systems", Department of Computer and Information Sciences, University of Alabama, Birmingham, AL, January 2000.

- 21. "Experiences in Building Distributed-object Systems", Symposium on Object-oriented Distributed Computing at the 77th Annual Meeting of the Alabama Academy of Science, Birmingham, AL, March 2000.
- 22. "D-SIFTER: A Case Study in Designing a Multi-Agent System", Spring 2000 Meeting of the Institute for Operation Research and the Management Sciences Computing Society, Salt Lake City, UT, May 2000.
- 23. "Distributed-object Systems", IBM Watson Research Center, Hawthorne, NY, May 2000.
- 24. "SIFTER: A Content-based Information Filtering System" (joint), NSF Digital Libraries Initiative All-Projects Meeting, Stratford-upon-Avon, England, June 2000.
- 25. "D-SIFTER: A Distributed Information Filtering System", NSF Digital Libraries Initiative All-Projects Meeting, Stratford-upon-Avon, England, June 2000.
- 26. "Distributed-object Systems", NiSys Corporation, Indianapolis, IN, July 2000.
- 27. "Heterogeneous Distributed-object Computing", Indiana SERC Showcase, Indianapolis, IN, June 2001.
- 28. "A Framework for Seamless Integration of Distributed Heterogeneous Software Components", ONR CIP/SW Meeting, Arlington, VA, July 2001.
- 29. "UniFrame" (joint), OMG Technical Meeting, Toronto, Canada, September 2001.
- 30. "UniFrame" (joint), Indiana SERC Fall Showcase, Ball State University, Muncie, IN, December 2001.
- 31. "UniFrame" (joint), OMG Technical Meeting, Anaheim, CA, February 2002.
- 32. "Encompassing .Net into UniFrame" (joint), SERC Spring Showcase, University of West Virginia, Morgantown, VW, May 2002.
- 33. "UniFrame", Office of Naval Research, London, England, May 2002.
- 34. "UniFrame", (joint), University of Edinburgh, Edinburgh, Scotland, May 2002.
- 35. "UniFrame", (joint), Lancaster University, Lancaster, England, May 2002.
- 36. "UniFrame", NSF US-EU Workshop, Landsdowne, VA, September 2002.
- 37. "QoS Framework of UniFrame" (joint), SERC Fall Showcase, Ball State University, Muncie, IN, December 2002.
- 38. "UniFrame", VJTI, University of Mumbai, Mumbai, India, December 2002.
- 39. "UniFrame", ONR CIP/SW Review, Harpers Ferry, VA, May 2003.
- 40. "UniFrame", ONR CIP/SW Review, Annapolis Junction, MD, November 2003.
- 41. "Model-driven Security: Unification of the Authorization Models for Fine-grain Access Control" (joint), SERC Fall Showcase, Ball State University, Muncie, IN, December 2003.
- 42. "Modeling Component Quality of Service" (joint), SERC Spring Showcase, West Virginia University, Morgantown, WV, May 2004.
- 43. "Experiments with the UniFrame Resource Discovery System", CS Department, University of Alabama at Birmingham and IEEE Computer Society Chapter, Birmingham, AL, July 2005.
- 44. "UniFrame: An Exercise in Developing Distributed Software Systems", Department of Information Systems and Operations Management, Ball State University, Muncie, IN, November 2005.
- 45. "Computer Science at IUPUI", Department of Computer Science, Ball State University, Muncie, IN, October 2006.
- 46. "Experimenting with Multi-level Matching of Software Components" (joint), SERC Fall showcase, Muncie, IN December 2006.
- 47. "Computer Science at IUPUI", Ruparel College, SIES College, Vivekanand College, Xavier Institute of Engineering, Kelkar College, Somaiya College, Sathye College, and VPM Polytechnic College, India, January 2008.
- "Experiments with Multi-level Contracts and Matching in Distributed Systems The UniFrame Way", Department of Electrical and Computer Engineering, IUPUI, Indianapolis, IN, February 2008.

- 49. "UniFrame", Research Day, IUPUI, Indianapolis, IN, March 2009.
- 50. "S²ERC Research at IUPUI", SERC Showcase, Indianapolis, IN, September 2009.
- 51. "MDE-URDS", VJTI, Mumbai, India, April 2011.
- 52. "MDE-URDS", VESIT, Mumbai, India, April 2011.
- 53. "A Distributed Framework for Location Tracking" (joint), S²ERC Showcase, Arlington, VA, May 2012.
- 54. "Modeling, Specifying, Discovering, and Integrating Trust into Distributed Real-time and Embedded (DRE) Systems" (joint), S²ERC Showcase, Ames, IA, November 2011; Arlington, VA, May 2012; Muncie, IN, November 2012; Chicago, IL, May 2013.
- 55. "Testing-as-a-Service: Static Code Analysis (SCA) Tool Study", (joint), S²ERC Showcase, Muncie, IN, November 2012; Chicago, IL, May 2013, Indianapolis, IN, November 2015.
- "Trustworthy Cloud Computing using an Adaptive Architecture", (joint), S²ERC Showcase, Muncie, IN, November 2012.
- 57. "Using Multi-core Architectures to Improve Real-time Instrumentation Capabilities of Software Systems", (joint), S²ERC Showcase, Muncie, IN, November 2012.
- 58. "Trust in Distributed Software Systems", Keynote Address, 2nd International Conference on Network Infrastructure Management Systems, Mumbai, India, June 2013.
- 59. "A Holistic Approach to Software Reuse" S²ERC Showcase, Pensacola, FL, November 2013.
- 60. "A Narrative-based Approach to Requirement Analysis" (joint), S²ERC Showcase, Washington DC, May 2014.
- 61. "Development of a Defect Prediction System using Machine Learning Techniques" (joint), S²ERC Showcase, Muncie, IN, November 2014.
- 62. "Analyzing and Evaluating Security Features in Software Requirements", (joint) S²ERC Showcase, Roanoke, VA, May 2015.
- 63. "Ranking and Recommending Secure Services", (joint) S²ERC Showcase, Indianapolis, IN, November 2015.
- 64. "Quantifying, Assessing and Composing Trust in IoT", S²ERC Showcase, Indianapolis, IN, November 2015.
- 65. "Summarizing and Interpreting Semi-structured Data Over Long-term Using Evidence", (joint) S²ERC Showcase, Muncie, IN, May 2016.
- "Collecting and Analyzing Internal Evidence of Software Services via Model Checking", (joint) S²ERC Showcase, Washington DC, May 2017.
- 67. "High-assurance, Quality-aware, and Verifiable Distributed Software Systems Still the Final Frontier?", National Institute of Technology Calicut, India, January 2018.
- 68. "High-assurance, Quality-aware, and Verifiable Distributed Software Systems Still the Final Frontier?", International Virtual Conference on Industry 4.0, Organized by VIT and Manchester Metropolitan University, July 2020.
- 69. "Multi-lingual Cyberbullying detection using collaborative approaches", 3rd International Virtual Conference on Recent Trends in Advanced Computing Artificial Intelligence and Technologies, December 2020.
- 70. "Science@IUPUI", Somaiya Polytechnic Institute, Mumbai, India, October 2022.
- 71. "SERS: A Security-related and Evidence-based Ranking Scheme for Mobile Apps", VJTI, Mumbai, India, October 2022.
- 72. "Data Science Program@IUPUI", MIT-World Peace University, Pune, India, October 2022.
- 73. "Engineering Next-gen Systems", Symbiosis Institute of Technology, Pune, India, October 2022.

Panels

1. "Grant Workshop", IUPUI School of Science, 2006.

- 2. "Best Practices in Industry Advisory Board Development", Panelist at the Annual Meeting of the Council of Colleges of Arts & Sciences, November 2019.
- 3. "Preparing Applications for M.S. in Computer Science", Panelist in the webinar organized by Yashna Trust-EducationUSA, July 2022.
- 4. "STEM Around the World", Panelist in the webinar organized by WiSH, Purdue House, and I-House, IUPUI, February 2022.

Professional Service

Editorial Boards

- Guest Editor ACM SIGAPP Computing Review A Special Issue on Distributed Computing – Spring 1999
- Guest Co-Editor ACM SIGAPP Computing Review A Special Issue on Object and Component Technologies for Cluster Computing 2001/2002
- Associate Editor International Journal of E-adoption 2008-
- Member of the Editorial Board International Journal of Information Technology, Communications and Convergence – 2009-2017
- Member of the Editorial Board Software Engineering: An International Journal 2011-15
- Member of the Editorial Board CSI Transactions on ICT 2011-2015
- Member of the Editorial Board Services Transactions on Internet of Things 2016-

Conference Organization

- Session Chair ADCOMP 1997; INFORMS Spring 2000; HICSS 2003; ICICI 2009; NBiS – 2009; INTERFACE – 2011 and 2013
- Publicity Chair of *Euro-PADS* 1998
- Workshop Co-chair IEEE International Workshop on Object and Component Technologies for Cluster Computing IEEE International Symposium on Cluster Computing and the Grid (CCGRID) 2001
- Mini-track Chair Distributed Objects and Components ACM Symposium on Applied Computing (SAC) 2001
- Track Co-chair Programming Languages and Object Technology ACM Symposium on Applied Computing (SAC) 2002 and 2003
- Mini-Track Co-Chair Distributed Object and Component-based Software Systems Annual Hawaii International Conferences on System Sciences (HICSS) 2003, 2004 and 2005
- Track Co-chair Object-Oriented Programming and Systems ACM Symposium on Applied Computing (SAC) 2004 and 2005
- Publicity Chair *HiPC* 2005-07
- Program Vice-Chair *The 14th IEEE International Conference on Parallel and Distributed Systems (ICPADS)* – 2008
- Track Co-Organizer Model-Based Software Engineering Track 20th International Conference on Software Engineering and Knowledge Engineering (SEKE) 2008
- Program Vice-Chair The IEEE International Conference on High Performance Computing and Communications (HPCC) 2008 and 2010
- Member of the Advisory Board *The 1st International Conference on Computer, Communication and Instrumentation (ICCCI)* 2009
- Track Chair Networked Based Information Systems (NBiS) 2009
- Local Arrangements Chair ACM SPLASH Conference 2013
- Local Host Security and Software Engineering Fall Showcase (NSF Industry University Cooperative Research Center) 2015

- Track Co-chair *Programming Languages Track ACM Symposium on Applied Computing* (SAC) 2018-present
- General Conference Chair International Conference on Recent Trends in Advanced Computing 2020

Conference Program Committee Membership

- 6th International Conference on Advanced Computing (ADCOMP 1998)
- 1st IEEE Computer Society International Workshop on Cluster Computing (IWCC 1999)
- IEEE Advances in Digital Libraries (ADL 2000)
- IEEE International Conference on Algorithms and Architecture for Parallel Processing (2000, 2002, 2005, 2007-09, 2014-15)
- IEEE Enterprise Distributed Object Computing Conference (EDOC) (2003-present)
- 2nd International Conference on Web-based Learning (ICWL 2003)
- High Performance Computing Symposium (HPC 2004)
- Generative Programming and Component Engineering for QoS Provisioning in Distributed Systems (GPCE4QoS 2006)
- IEEE International Conference on Digital Information Management (ICDIM 2006-07)
- IEEE International Workshop on Trusted and Autonomic Computing Systems (TACS 2006)
- International Conference on Digital Information Management (ICDIM 2007-08)
- International Conference on Software Engineering and Knowledge Engineering (SEKE) (2008present)
- International Conference on Soft Computing as Transdisciplinary Science and Technology (2008)
- HiPC Student Symposium (2009-10)
- IEEE International Conference on High Performance Computing and Communications (2013-14)
- IEEE International Conference on Services Computing (2014-2019)
- 3rd International Conference on Network Infrastructure Management Systems (2014)
- 10th EAI International Conference on Bio-inspired Information and Communications Technologies (2015-17)
- ACM SAC, Cloud Computing Track (2016-17)

External Reviewer

- East Carolina University
- University of North Texas
- University of Sharjah
- US NIST
- National Science Foundation [Panelist]
- Kansas State University
- Naval Post-graduate School
- University of Missouri at Kansas City
- University of Alabama at Birmingham
- University of West Florida
- University of Colorado at Denver
- University of Washington at Tacoma
- Cleveland State University
- University of UAE

- The Chinese University of Hong Kong
- The Hong Kong Polytechnic University
- RMIT, Australia
- Deakin University, Australia
- IIT-Delhi, India
- Tezapur University, India
- NIT-Calicut, India
- NIT-Surathkal, India
- MIT-WPU, India

Paper Reviewer

- ACM Transactions on Social Computing
- IEEE Transactions on Services Computing
- IEEE Transactions on Cloud Computing
- IEEE Internet Computing
- IEEE Transactions on Software Engineering
- Computers in Human Behavior
- Applied Soft Computing
- International Journal of E-Adoption
- Engineering Reports
- Frontiers of Information Technology & Electronic Engineering
- IEEE Computer
- IEEE Intelligent Systems
- Journal of Parallel and Distributed Computing
- Parallel and Distributed Computing Practice Journal
- Cluster Computing
- Concurrency and Computation: Practice and Experience
- ACTA International Journal of Computers and Applications
- IPSI Journal
- Electronics and Telecommunications Research Institute
- Journal Computer Languages, Systems & Structures Journal
- Journal of Systems and Software
- CSI Transactions on ICT
- Data and Knowledge Engineering Journal
- IEEE International Conference on Services Computing
- IEEE International Conference on High Performance Computing and Communications
- International Conference on Software and Knowledge Engineering
- IEEE Enterprise Distributed Computing Conference
- Hawaii International Conference on System Sciences
- IEEE International Conference on Algorithms and Architecture for Parallel Processing
- ACM Symposium on Applied Computing
- IEEE Advances in Digital Libraries
- European Conference on Parallel Computing
- Parallel and Distributed Computing Systems Conference
- John Wiley and Sons, Inc.
- Prentice-Hall, Inc.
- Scott-Jones Publishing Company
- Morgan-Kaufman Publishing Company

Service

IUPUI

- Science Olympiad [Volunteer] (1995)
- Centrality Study Group [Member] (1995-96)
- Campus Promotion and Tenure Committee [Member] (2010-11)
- India Interest Group [Member] (2010-15)
- Office of Vice Chancellor for Research [Proposal Reviewer] (2011-12, 2017, 2019)
- Top 100 Judge (2012-2016)
- Council of Associate Deans for Faculty Affairs [Member] (2020-present)
- Steering Committee for India-based Recruitment Initiative [Member] (2021-present)

School of Science

- Learning and Assessment Committee [Member] (1997-98)
- Windows on Science Program [Mentor] (1997-98)
- Academic Appeals Committee [Member and Chair] (1998-99)
- Graduate Affairs Committee [Member] (2003-08)
- Nomination and Awards Committee [Member and Chair] (2005-06)
- Faculty Grant Workshop [Panelist] (2006)
- Graduate Training Strategic Working Group [Member] (2007)
- Dean Search Committee [Member] (2007-08, 2010-11)
- Associate Dean Search Committee [Member] (2008)
- Unit Committee [Member and/or Chair] (2010-12; 2012-19)
- Ad-Hoc Committee for P & T Guidelines [Member] (2012-13)
- Graduate Education Committee [Member] (2013-15)
- Task Force for P&T Guidelines [Member and/or Coordinator] (2014-19)
- Assistant to Dean Search Committee [Chair] (2020, 2022)
- Associate Dean Search Committee [Co-Chair] (2021)

Department of Computer and Information Science

- Undergraduate Committee [Member and/or Chair] (1996-97, 1998-99, 2001-02, 2016-18)
- Chair Selection Committee [Member] (1997, 2007)
- Research & Infrastructure Committee [Member] (1997-00)
- Seminar and Colloquia Committee [Chair] (2002-03)
- Primary Committee [Member and/or Chair] (2006-08, 2010-18)
- Graduate Committee [Chair] and Graduate Program Director (2006-15)
- Faculty Search Committee [Member and/or Chair] (2008-10, 2013-14, 2016-18)
- Industrial Partnership Program [Co-Creator] (2017, 2018)

Community

- Volunteer, North-South Foundation
- Volunteer, Maharashtra Sneha Mandal of Indiana
- Supporter of many local and national charities