

# Curriculum Vitae

**Rajeev R. Raje**

Associate Dean

School of Science

Professor

Department of Computer and Information Science

Indiana University Purdue University Indianapolis

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September 11, 2022

## Name

Rajeev R. Raje

## Education

Ph.D. in Computer Engineering, Syracuse University, Syracuse, NY, 1994

M.S. in Computer Engineering, Syracuse University, Syracuse, NY, 1994

B.E. in Electrical Engineering, VJTI, University of Bombay, Bombay, India, 1984

## Summary

- Senior Researcher, Educator, and Administrator with 28 years of higher education experience and a successful track record of implementing many academic initiatives; Author/Co-author of 150+ peer-reviewed publications; PI/Co-PI for grants worth more than \$6.5M; Senior Member of ACM and IEEE; Recipient of awards including the Trustees Teaching Award, School of Science Teaching and Service Awards, J. N. Tata Endowment Scholarship, and other research, teaching, and service honors.

## Professional Appointments

- January 2019 – Present  
Associate Dean for Planning, Finance, and Faculty Affairs  
School of Science  
Indiana University Purdue University Indianapolis (IUPUI), Indianapolis, IN

### *Responsibilities*

- Plan for and advise the Dean on fiscal, faculty, personnel, IT, international collaborations, and research needs of the school.
- Construct, oversee, and manage the school's budget (~70M\$) including fiscal oversight of the new research and education building.
- Act as a liaison for all faculty-related matters including the tenure and promotion guidelines and the associated process.
- Initiate educational and research collaborations with international universities.
- Directly supervise the HR, IT, and fiscal personnel of the School.
- Create, update, streamline, and maintain all the operating policies of the school.
- Represent the school on the Council of Associate Deans for Faculty Affairs and on the India Recruitment Steering Committee.

### *Accomplishments*

- Successfully implemented university mandated fiscal cuts, to offset the effects of the pandemic, to the school's budget without eliminating any occupied positions for 2 consecutive years.
- Ensured a smooth transition of faculty-, HR-, IT-, and fiscal-related functions of the school during two deanship changes and the ongoing pandemic.
- Efficiently managed financial aspects of a new teaching and research building.

- Assisted the Dean in appointing 3 new Chairs and reappointing 2 Chairs in last two years. Provided personalized information sessions to the 2 new Chairs.
  - Formulated, in conjunction with the Deans and Chairs, comprehensive packages for successful hiring of 9 new tenure track and 7 non-tenure track colleagues in last three and half years. Also, assisted the Deans in designing retention packages for many faculty and staff colleagues.
  - Currently leading the faculty and staff groups tasked with the creation of the development guidelines for the school's new strategic plan.
  - Created and enhanced various policies such as the Administrative Supplement, Research Faculty Hiring, Graduate Fee Remission, Research Instrument Purchase and Repair, Distance Education Fee, and IT policies.
  - Initiated and oversaw multiple academic partnerships with Indian Universities for joint (e.g., 2+2 and 3.15+1.5) academic programs. Many MoU (Memorandum of Understanding) and LoI (Letter of Intent), with Indian Universities, were signed during past three years.
  - Participated in hiring, and oversaw on-boarding, of a Recruitment Manager in India – Applications and admits, for Indian students, for fall'22 are up by 123% and 241%, respectively, when compared with the pre-pandemic levels.
  - Contributed to the enhancement of the Promotion and Tenure guidelines for incorporating DEI-related specifics and the creation of the faculty grievances policy.
  - Represented the school on a campus-wide task force that developed strategies for dealing with campus' internationalization efforts during the pandemic.
- January 2012 – August 2019  
Chair of the Promotion and Tenure (P&T) Committee  
School of Science, IUPUI, Indianapolis, IN

*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.
  - Significantly streamlined school's entire P&T process.
  - Conceptualized and co-organized annual P&T workshops (since 2018) for tenure and non-tenure faculty colleagues – these workshops are highly appreciated by colleagues. Achieved 95+% P&T success rate for the school.
  - Formally and informally mentored many, including URM and women, faculty colleagues in their P&T journey.
- September 2007 – December 2018  
Associate Chair (Acting Chair in Fall'15)  
Department of Computer and Information Science, IUPUI, Indianapolis, IN

*Responsibilities*

- Advise and assist the Chair on all academic and fiscal aspects of the department.

- Act as Chair's proxy during his absence and represent the department at the school and the campus level.

*Accomplishments*

- Led the creation of the self-assessment report for the external review of the department and the proposal for autonomous Ph.D. program.
  - Received the approval for an autonomous Ph.D. program, by the Indiana Commission for Higher Education, during my tenure as the Acting Chair.
  - Made significant contributions to the creation and nurturing of the CIS Ph.D. Program.
  - Co-created the CIS Industrial Partnership Program.
  - Chaired the Faculty Search Committees many times, including the years when URM and women faculty colleagues were hired.
- September 2006 – July 2015  
Graduate Program Director  
Department of Computer and Information Science (CIS), IUPUI, Indianapolis, IN

*Responsibilities*

- Oversee, grow, and ensure the quality of the Graduate Program in the department.

*Accomplishments*

- Significantly (by many folds) expanded the graduate programs (both M.S. and Ph.D.).
  - Coordinated the entire Ph.D. qualification process, for many years, with the Computer Science Department and the Graduate School at Purdue University.
  - Initiated and nurtured multiple efforts to create joint academic programs with international universities.
  - Received an approval for 6 new Graduate Certificates.
- September 2006 – August 2007  
Interim Associate Chair  
Department of Computer and Information Science, IUPUI, Indianapolis, IN
  - July 2009 – Present  
Professor  
Department of Computer and Information Science, IUPUI, Indianapolis, IN
  - Spring 2004 – Spring 2006  
Adjunct Associate Professor (Courtesy Appointment)  
Department of Computer and Information Sciences, University of Alabama at Birmingham, Birmingham, AL
  - August 2002 – June 2009  
Associate Professor  
Department of Computer and Information Science, IUPUI, Indianapolis, IN
  - August 1996 – July 2002  
Assistant Professor  
Department of Computer and Information Science, IUPUI, Indianapolis, IN

- August 1994 – July 1996  
Visiting Assistant Professor  
Department of Computer and Information Science, IUPUI, Indianapolis, IN
- September 1988 – July 1994  
Graduate Research Assistant  
NY CASE Center & Department of Electrical and Computer Engineering, Syracuse University, Syracuse, NY
- May 1988 – August 1988  
Graduate Research Assistant  
Department of Electrical Engineering, University of Rhode Island, Kingston, RI
- September 1987 – August 1988  
Assistant and Graduate Assistant  
Administrative Computer Center, University of Rhode Island, Kingston, RI
- June 1984 – August 1987  
Project Engineer  
Controls and Automation Systems Engineering Division  
Siemens Limited, Bombay, India

## Research Interests

- Distributed and Component-based Systems, Software Engineering, Service-oriented Computing, Faculty Affairs, and Higher-ed Administration

## Honors and Awards

- *First-place winner*, as a member of IUPUI's team, in the *NSF's COVID Challenge – Faculty category*, 2022
- *IUPUI School of Science Service Award*, 2020
- *Keynote Talk*, 3<sup>rd</sup> 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, 2<sup>nd</sup> 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 paper, BRIC Bioinformatic Online Newsletter*, 2005
- *Recognition Plaque, 12<sup>th</sup> 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
- *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 at 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 at IUPUI
- The *Overall Professor of the Year 1995-96*, Computer Science Club and the Department of Computer and Information Science, IUPUI
- *Graduate Research 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 1<sup>st</sup> Rank, University of Bombay, 1982-83
- *Shekhar N. Naik Silver Medal for Science*, Indian Education Society, 1978

## Grants (External and Internal - as PI and Co-PI)

1. Real-Time Algorithms and Software Systems for Heterogeneous Data Driven Policing of Social Harm, NSF, \$791,513, 2017-22 (Co-PI)
2. RealCV: Making the Invisible Visible, Indiana University, \$48,311, 2020-23 (Co-PI)
3. Static Code Analysis Tool Modernization Project, Kestrel Technology and DHS, \$49,340, 2016-18 (Co-PI)
4. Reducing False Positive Reported By Static Code Analysis Tools, Department of Homeland Security, \$580,458, 2015-20 (Co-PI)
5. Testing-as-a-Service: Static Code Analysis (SCA) Tool Study – Phases I-IV, *S<sup>2</sup>ERC*, Lockheed Martin, Northrop Grumman and Department of Homeland Security, \$111,541, 2013-16 (Co-PI)
6. Grant for hosting 2015 *S<sup>2</sup>ERC* Fall Showcase, IUPUI, \$3,500, 2015 (PI)
7. A Pervasive Computing Infrastructure for Supporting CS Graduate Courses, IUPUI SoS Teaching Support, \$27,657, 2014-15 (Joint PI)
8. Modeling, Specifying, Discovering, and Integrating Trust into Distributed Real-time and Embedded (DRE) Systems, *S<sup>2</sup>ERC* and Air Force Research Lab, \$79,000, 2011-13 (PI)
9. A Distributed Framework for Indoor Location Tracking, Purdue Research Foundation Research Grant, \$17,608, 2013-14 (Joint PI)
10. International Travel Grant, Purdue Research Foundation, \$1,000, 2011
11. Developing a Fast and Accurate Parallel Solver for Multi-scale Biochemical Reacting Systems, IUPUI, \$2000, 2009-10 (Co-PI)
12. Developing Fast and Accurate Embarrassingly Parallel Solver for Multi-Scale Chemically Reacting Systems, IUPUI, \$1500, 2008-09 (Co-PI)
13. Signature Center for Bio-Computing, IUPUI, \$285,000, 2007-2009 (Co-PI)
14. An Environment for Distributed Component-based Software Development, Indigo Foundation, \$26,400, 2005-2006 (PI)
15. A Framework for Seamless Interoperation of Heterogeneous Distributed Software Components, US Office of Naval Research, \$1,558,803, 2001-2005 (PI)
16. Indiana University SUR Proposal: Information Technology Applications for the Life Sciences, IBM Corporation, \$1.2 Million (hardware), 2001 (Co-PI)
17. Test-assessment and Minimization for the Microsoft Windows NT Operating System, Microsoft Corporation, \$93,742, 2000-2002 (PI)
18. An Active, Personalized, Adaptive, Multi-format Biological Information Delivery System, National Science Foundation, \$494,297, 2000-2004 (Co-PI)
19. Indiana University SUR Proposal: Tightly integrated distributed supercomputing - the Indiana TeraCloud, IBM Corporation, \$1 Million (hardware), 2000-2001 (Co-PI)

20. A Distributed Information Filtering System for Digital Libraries, National Science Foundation, \$315,386, 1999-2003 (Co-PI)
21. Intelligent Software System for Bimolecular Database Access and Analysis, Eli Lilly & Company, \$22,200, 1999-2000 (Co-PI)
22. Biomedical Tele-Visualization, Indiana University High Performance Network Applications Program, \$20,000, 1999-2000 (Co-PI)
23. 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: 1-60021-202-6, 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

3. 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.
4. Rajeev R. Raje, Anantharaman Kalyanraman, Nanditha Nayani, "Distributed-Object Computing Tools", *Tools and Environments for Parallel and Distributed Computing*, pp. 79-147, 2004.
5. 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.
6. 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.
7. 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.
8. 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.
9. 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.



10. 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.
11. 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.
12. 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

13. Rajeev R. Raje, "SIMATIC S5-110S DIMOS - Diagnostics and Monitoring System", *Siemens Circuit*, Vol. XXII, 1-2/87 (January/April 1987), pp. 34-37.
14. 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).
15. 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.
16. Rajeev Raje, Michael Boyles, Shiao-fen Fang, "CEV: Collaborative Environment for Visualization Using Java-RMI", *Concurrency: Practice and Experience*, Vol. 10(11-13), pp. 1079-1085, (1998).
17. 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.
18. 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.
19. Rajeev R. Raje, "Experiences in building Distributed-object Systems", (Invited) *Journal of Alabama Academy of Sciences*, Vol. 71, No. 2, pp. 57, April 2000.
20. 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.
21. 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.
22. 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.

23. 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.
24. Snehasis Mukhopadhyay, Shengquan Peng, Rajeev R. Raje, Mathew Palakal, Javed Mostafa, "Large-scale 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.
25. 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.
26. 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.
27. 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.
28. 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.
29. 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.
30. 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.
31. 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.
32. 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.
33. 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.
34. 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.

35. 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.
36. Lahiru Gallege, Dimuthu Gamage, James Hill, Rajeev R. Raje, “Understanding the Trust of Software-intensive Distributed Systems”, *Concurrency and Computation: Practice and Experience*, 28(1): 114-143, 2016.
37. 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.
38. 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.
39. 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.
40. 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.
41. 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.
42. 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).
43. 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.

### **Journal Articles Under Review**

44. Dimuthu Gamage, Rajeev R. Raje, “Distributed Computing Applications of Context-Aware QoS and Trust Prediction Framework”, *IEEE Transactions on Services Computing*, 2022.
45. Nahida Sultana Chowdhury, Ayush Maharjan, Rajeev R. Raje, “E-SERS: An Enhanced Approach to Trust-based Ranking of Apps”, *IEEE Transactions on Technology and Society*, 2022.

### **Refereed Conference/Workshop Proceedings**

*(Note: Due to the unique and dynamic nature of Computer Science, it is an accepted practice to consider peer reviewed journal and peer reviewed conference publications to be equivalent. This policy is also consistent with the Best Practices Memo article that appeared in the Computing Research News ([https://archive.cra.org/reports/tenure\\_review.pdf](https://archive.cra.org/reports/tenure_review.pdf)). The 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.)*

46. Daniel J. Pease, Rajeev R. Raje, "SHARADA - A Sharable HierARchical Architectural Database", *Proceedings of International Conference on Advances in Data Management, CO-MAD'91*, Bombay, India, 1991.
47. 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, ESS'93*, Delft, The Netherlands, 1993.
48. 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.
49. 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.
50. 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), HICSS-29*, Hawaii, 1996.
51. 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, SAC'96*, Philadelphia, Pennsylvania, 1996.
52. 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.
53. Chihfeng Lin, Daniel Pease, Rajeev R. Raje, "An Optimal-Joint-Coordinate Block Matching Algorithm for Motion-Compensated Coding" *Proceedings of IEEE 1997 Data Compression Conference DCC '97*, Snowbird, Utah, 1997.
54. Rajeev R. Raje, Snehasis Mukhopadhyay, Michael Boyles, Nila Patel, Javed Mostafa, "D-SIFTER: A Collaborative Information Classifier", *Proceedings of the International Conference on Information, Communication and Signal Processing (organized by IEEE Singapore Section), ICICS'97*, Singapore, 1997.
55. Rajeev R. Raje, Dennis Gannon, "A Timing Experiment with Java-RMI, CORBA and C-RPC", *Proceedings of the 5th International Conference on Advanced Computing (organized in-cooperation with IEEE Computer Society), ADCOMP'97*, Chennai, India, 1997.
56. Rajeev R. Raje, Snehasis Mukhopadhyay, Michael Boyles, Artur Papiez, "An Economic Framework for a Web-based Collaborative Information Classifier", *Proceedings of the International Association of Science and Technology for Development, SE'97 Conference*, San Francisco, California, 1997.
57. Rajeev R. Raje, Snehasis Mukhopadhyay, Michael Boyles, Nila Patel, Javed Mostafa, "On Designing and Implementing a Collaborative System Using Java-RMI", *Proceedings of the 5th International Conference on Advanced Computing (organized in-cooperation with IEEE Computer Society), ADCOMP'97*, Chennai, India, 1997.
58. Rajeev R. Raje, Antony Teal, Joseph Coulson, Sihai Yao, William Winn, Edward Guy III, "CCASEE - A Collaborative Computer Assisted Software Engineering Environment", *Proceedings of the International Association of Science and Technology for Development (IASTED), SE'97 Conference*, San Francisco, California, 1997.

59. Chihfeng Lin, Daniel Pease, Rajeev R. Raje, “An Efficient Block Matching Algorithm Based on a Valid Assumption of the Convex Distortion”, *Proceedings of IEEE International Conference on Image Processing, IICIP’97*, Washington, DC, 1997.
60. Sivakumar Chinnasamy, Rajeev R. Raje, Zhiqing Liu, “Specification of Design Patterns: An Analysis”, *Proceedings of the 7th International Conference on Advanced Computing and Communications (Co-sponsored by IEEE Computer Society), ADCOM’99*, Roorkee, India, 1999.
61. Rajeev R. Raje, Snehasis Mukhopadhyay, Mingyong Qiao, Mathew Palakal, Javed Mostafa, “Experiments with a Distributed Information Filtering System”, *Proceedings of the 4th World Multiconference on Systems, Cybernetics and Informatics, SCI-2000*, Orlando, Florida, 2000.
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## Editorial Comments

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180. 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.
181. Sonali Sharma, Rajeev R. Raje, "A Framework for Creating Adaptive Software Services and Distributed Systems", S<sup>2</sup>ERC Showcase, Muncie, IN, November 2012.
182. 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.
183. Ryan Rybarczyk, Rajeev R. Raje, Mihran Tuceryan, "e-DOTS: An Indoor Tracking Solution", IUPUI Research Day, 2012 and 2013.
184. 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.
185. Ryan Rybarczyk, Rajeev R. Raje, Mihran Tuceryan, "Opportunistic Indoor Tracking", IUPUI Innovation to Enterprise Showcase & Forum, 2013.
186. Lakshmi Manohar Rao Velicheti, Dennis C. Feiock, Rajeev R. Raje, James H. Hill, "Testing-as-a- Service: Static Code Analysis (SCA) Tool Study", S<sup>2</sup>ERC Showcase, Chicago, IL, May 2013 Pensacola, FL, November 2013, Washington DC, May 2014, and Muncie, IN November 2014.
187. Lahiru Gallege, Dimuthu Gamage, James Hill, Rajeev Raje, "A Holistic Approach to Software Reuse" S<sup>2</sup>ERC Showcase, Pensacola, FL, November 2013.

188. Allenous Hayrapetian, Lahiru Gallege, James Hill, Rajeev Raje, "A Narrative-based Approach to Requirement Analysis", S<sup>2</sup>ERC Showcase, Washington DC, May 2014.
189. Ruchika Malhotra, James Hill, Rajeev Raje, "Development of a Defect Prediction System using Machine Learning Techniques" S<sup>2</sup>ERC Showcase, Muncie, IN, November 2014.
190. Amrita Mangaonkar, Allenous Hayrapetian, Rajeev Raje, "Detection of Cyberbullying in Twitter Data using Collaborative Approaches" S<sup>2</sup>ERC Showcase, Muncie, IN, November 2014.
191. Allenous Hayrapetian, Ruchika Malhotra, Rajeev Raje, "Analyzing and Evaluating Security Features in Software Requirements", S<sup>2</sup>ERC Showcase, Roanoke,VA, May 2015.
192. Rajeev Raje, Dimuthu Gamage, "Quantifying, Assessing and Composing Trust in IoT", S<sup>2</sup>ERC Showcase, Indianapolis, IN, November 2015.
193. Xia Ning, Rajeev Raje, "Ranking and Recommending Secure Services", S<sup>2</sup>ERC Showcase, Indianapolis, IN, November 2015.
194. Rajeev Raje, Lahiru Gallege, Ryan Rybarczyk, "Summarizing and Interpreting Semi-structured Data Over Long-term Using Evidences", S<sup>2</sup>ERC Showcase, Muncie, IN, May 2016.
195. Rajeev Raje, Ryan Rybarczyk, Xia Ning, Nahida Chowdhury, "Collecting and Analyzing Internal Evidences of Software Services via Model Checking", S<sup>2</sup>ERC Showcase, Washington DC, May 2017.
196. Nahida Chowdhury, Rajeev Raje, "TRR: Trust-based Mobile apps selection and ordering over traditional feedback mechanism", Research Day, IUPUI, Indianapolis, IN, April 2018.
197. 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.
198. Nahida Chowdhury, Rajeev R. Raje, "A Comprehensive Ranking Scheme for Apps", Grad Cohort for Women 2019, CRA-W, Chicago, IL, April 2019.

## Abstracts

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

## Technical Reports

202. Rajeev R. Raje, Daniel J. Pease, "A Class Algebra - A New Approach to Class Analysis", NY CASE Center, No. 9309, pp: 1-45, 1993.

203. Sivakumar Chinnasamy, Yi Dai, Rajeev R. Raje, “Formalization of Design Pattern Specifications: A Survey”, Department of Computer and Information Science Technical Report, TR-CIS-0799-14, 1999.
204. Girish Brahmamath, Rajeev R. Raje, Andrew Olson, Changlin Sun, “Quality of Service Catalog for Software Components”, Technical Report (TR-CIS-0219-01), Department of Computer and Information Science, Indiana University-Purdue University Indianapolis, 2001.
205. Carol Burt, Barrett R. Bryant, Rajeev R. Raje, Andrew Olson, Mikhail Auguston, “An analysis of Distributed Component Architectures Standards and the QOS standards Needed to Progress Unification”, Technical Report (CIS-TR-2001-11), Department of Computer and Information Sciences, University of Alabama Birmingham, 2001.

### **Faculty Mentor for Stand-alone Student Publications**

206. Joseph Williams, “An Implicit Object Oriented Programming Environment Based on OFFERS” – Proceedings of First Indiana University Undergraduate Research Conference, 1995.
207. Sivakumar Chinnasamy, “Analysis of Design Patterns”, *IUPUI School of Science Graduate Research Symposium*, 1999.
208. Lahiru Gallege, “TruSSCom: Proposal for Trustworthy Service Representation, Selection and Negotiation for Integrating Software Systems”, *ACM SPLASH Doctoral Symposium*, 2013.
209. 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**

#### **Panels**

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

#### **Tutorials**

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

### **Invited Talks**

*(This list does not include 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.
6. "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.
8. "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" – *Plenary Speaker* – Symposium on Object-oriented Distributed Computing at the 77<sup>th</sup> 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, WV, 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.
48. "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. "S<sup>2</sup>ERC 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), S<sup>2</sup>ERC Showcase, Arlington, VA, May 2012.
54. "Modeling, Specifying, Discovering, and Integrating Trust into Distributed Real-time and Embedded (DRE) Systems" (joint), S<sup>2</sup>ERC 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), S<sup>2</sup>ERC Showcase, Muncie, IN, November 2012; Chicago, IL, May 2013, Indianapolis, IN, November 2015.
56. "Trustworthy Cloud Computing using an Adaptive Architecture", (joint), S<sup>2</sup>ERC Showcase, Muncie, IN, November 2012.
57. "Using Multi-core Architectures to Improve Real-time Instrumentation Capabilities of Software Systems", (joint), S<sup>2</sup>ERC Showcase, Muncie, IN, November 2012.
58. "Trust in Distributed Software Systems", Keynote Address, 2<sup>nd</sup> International Conference On Network Infrastructure Management Systems, Mumbai, India, June 2013.
59. "A Holistic Approach to Software Reuse" S<sup>2</sup>ERC Showcase, Pensacola, FL, November 2013.
60. "A Narrative-based Approach to Requirement Analysis" (joint), S<sup>2</sup>ERC Showcase, Washington DC, May 2014.

61. “Development of a Defect Prediction System using Machine Learning Techniques” (joint), S<sup>2</sup>ERC Showcase, Muncie, IN, November 2014.
62. “Analyzing and Evaluating Security Features in Software Requirements”, (joint) S<sup>2</sup>ERC Showcase, Roanoke, VA, May 2015.
63. “Ranking and Recommending Secure Services”, (joint) S<sup>2</sup>ERC Showcase, Indianapolis, IN, November 2015.
64. “Quantifying, Assessing and Composing Trust in IoT”, S<sup>2</sup>ERC Showcase, Indianapolis, IN, November 2015.
65. “Summarizing and Interpreting Semi-structured Data Over Long-term Using Evidences”, (joint) S<sup>2</sup>ERC Showcase, Muncie, IN, May 2016.
66. “Collecting and Analyzing Internal Evidences of Software Services via Model Checking”, (joint) S<sup>2</sup>ERC 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?”, Plenary Talk, International Virtual Conference on Industry 4.0, Organized by VIT and Manchester Metropolitan University, July 2020.
69. “Multi-lingual Cyberbullying detection using collaborative approaches”, Keynote Talk, 3<sup>rd</sup> International Virtual Conference on Recent Trends in Advanced Computing - Artificial Intelligence and Technologies, December 2020.

## Professional Service

### Editorial Boards

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

### Conference Organization

- Track Co-chair – *Programming Languages Track – ACM Symposium on Applied Computing (SAC)* – 2018-22

- General Conference Chair – *International Conference on Recent Trends in Advanced Computing* – 2020
- Local Host – *Security and Software Engineering Fall Showcase (NSF Industry University Cooperative Research Center)* – 2015
- Local Arrangements Chair – *ACM SPLASH Conference* – 2013
- Program Vice-Chair – *The IEEE International Conference on High Performance Computing and Communications (HPCC)* – 2008 and 2010
- Program Vice-Chair – *The 14th IEEE International Conference on Parallel and Distributed Systems (ICPADS)* – 2008
- Track Chair – *Networked Based Information Systems (NBIS)* – 2009
- Member of the Advisory Board – *The 1st International Conference On Computer, Communication And Instrumentation (ICCCI)* – 2009
- Track Co-Organizer – *Model-Based Software Engineering Track – Twentieth International Conference on Software Engineering and Knowledge Engineering (SEKE)* – 2008
- Publicity Chair of *Euro-PADS* – 1998
- Publicity Chair – *HiPC* – 2005-07
- Track Co-chair – *Object Oriented Programming and Systems – ACM Symposium on Applied Computing (SAC)* – 2004 and 2005
- 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 – *Programming Languages and Object Technology – ACM Symposium on Applied Computing (SAC)* – 2002 and 2003
- Mini-track Chair – *Distributed Objects and Components – ACM Symposium on Applied Computing (SAC)* – 2001
- 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
- Session Chair – *ADCOMP* – 1997; *INFORMS* – Spring 2000; *HICSS* – 2003; *ICICI* – 2009; *NBIS* – 2009; *INTERFACE* – 2011 and 2013

### Conference Program Committee Membership

- International Conference on Software Engineering and Knowledge Engineering (SEKE) (2008-Present)
- IEEE Enterprise Distributed Object Computing Conference (EDOC)(2003-Present)
- IEEE International Conference on Services Computing (2014-2019)
- IEEE International Conference on High Performance Computing and Communications (2013-14)

- ACM SAC, Cloud Computing Track (2016-17)
- 10th EAI International Conference on Bio-inspired Information and Communications Technologies (2015-17)
- HiPC Student Symposium (2009-10)
- IEEE International Conference on Algorithms and Architecture for Parallel Processing (2000, 2002, 2005, 2007-09, 2014-15)
- 3rd International Conference on Network Infrastructure Management Systems (2014)
- International Conference on Soft Computing as Transdisciplinary Science and Technology (2008)
- International Conference on Digital Information Management (ICDIM 2007-08)
- 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)
- High Performance Computing Symposium (HPC 2004)
- 2nd International Conference on Web-based Learning (ICWL 2003)
- IEEE Advances in Digital Libraries (ADL 2000)
- First IEEE Computer Society International Workshop on Cluster Computing (IWCC 1999)
- Sixth International Conference on Advanced Computing (ADCOMP 1998)

### **External Reviewer**

- University of North Texas
- University of Sharjah
- East Carolina University
- US NIST
- National Science Foundation
- 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

#### **Paper Reviewer**

- ACM Transactions on Social Computing
- IEEE Transactions on Services Computing
- IEEE Transactions on Cloud Computing
- IEEE Internet Computing
- Applied Soft Computing
- International Journal of E-Adoption
- Engineering Reports
- Frontiers of Information Technology & Electronic Engineering
- IEEE Transactions on Software 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

### **Professional Memberships**

- ACM (Senior Member)
- IEEE (Senior Member)

### **Service**

#### **IUPUI**

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



- Science Olympiad [Volunteer] (1995)

### **School of Science**

- Associate Dean Search Committee [Co-Chair] (2021)
- Assistant to Dean Search Committee [Chair] (2020, 2022)
- Associate Dean Planning, Finance and Faculty Affairs (2019-)
- Unit Committee [Member and/or Chair] (2010-12; 2012-2019)
- Task Force for P&T Guidelines [Member and/or Coordinator] (2014-2019)
- Graduate Education Committee [Member] (2013-15)
- Ad-Hoc Committee for P & T Guidelines [Member] (2012-13)
- Dean Search Committee [Member] (2007-08, 2010-11)
- Graduate Affairs Committee [Member] (2003-08)
- Associate Dean Search Committee [Member] (2008)
- Graduate Training Strategic Working Group [Member] (2007)
- Faculty Grant Workshop [Panelist] (2006)
- Nomination and Awards Committee [Member and Chair] (2005-06)
- Academic Appeals Committee [Member and Chair] (1998-99)
- Windows on Science Program [Mentor] (1997-98)
- Learning and Assessment Committee [Member] (1997-98)

### **Department of Computer and Information Science**

- Acting Chair (Fall'15)
- Interim Associate Chair and Associate Chair (2006-07; 2007-Summer'15; Spring 2016-18)
- Industrial Partnership Program [Co-Coordinator] (2017-18)
- Faculty Search Committee [Member and/or Chair] (2008-10, 2013-14, 2016-18)
- Chair Selection Committee [Member] (1997, 2007)
- Research & Infrastructure Committee [Member] (1997-00)
- Graduate Committee [Chair] and Graduate Program Director (2006-2015)
- Undergraduate Committee [Member and/or Chair] (1996-97, 1998-99, 2001-02, 2016-18)
- Seminar and Colloquia Committee [Chair] (2002-03)
- Primary Committee [Member and/or Chair] (2006-08, 2010-2018)

## 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++

## Student Supervision

- 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)
- M.S.: Sivakumar Chinnasamy, Mingyong Qiao, Nanditha Nayani, Girish Brahmamath, 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 Kambhupati (joint), Ravi Bulusu, Richard Neidermyer, Pratibha Katuri, Omkar Tilak, Amruta Jejurikar, Girish Joshi, Sucheta Phatak, Neha Talavdekar, Ketaki Pradhan, Ryan Rybarczyk, Aboli Phadke, Allenous 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, Ankit Sinha
- Ph.D./M.S. Thesis/Project Committee Membership: Nyalia Lui, Samira Khorshidi, Brandon Upp, Anushka Patil, Enas Alikhasashneh, Ping Zhang, Raja Dheekonda, Arvind Nair, Salman Haider, Feng Li, 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, Tanu-moy 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
- BS: Michael Boyles, Nila Patel, Joseph Williams, Muris Ridzal, James Freeman, Joseph Hansome, Ravi Patel, Zachary Reynolds (joint), Sujana Oruganti (joint)