Jaideep S. Vaidya

Management Science and Information Systems Department · 1 Washington Park
Rutgers University · Newark, NJ 07102-1803
Email: jsvaidya@rutgers.edu · Ph: (973)353-1441
US Citizen · Fax: (973)353-5003

Research Emphases and Contributions

My primary research interests lie in the fields of privacy, security, data analytics, data management, and especially at their intersection. I have made key contributions to the areas of secure and privacy-preserving information sharing and analytics. I am also very interested in the problems and issues in big data analytics applied to different domains such as biomedical informatics, healthcare management, digital government, and information security.

Education

Purdue University *West Lafayette, Indiana, USA*

Ph.D., Computer Science, August 2004

M.S., Computer Science, May 2001

University of Mumbai *Mumbai, Maharashtra, India*

B.S., Computer Engineering, May, 1999

Professional Experience

Rutgers University (2004-present)

Assistant (04-10), Associate (10-15), Full (15-22), Distinguished Professor	July 2022 – present
RBS Dean's Research Professor	September 2016 – June 2019
Director, Rutgers Institute of Data Science, Learning, and Applications	January, 2020 – present
Acting Chair, MSIS Department	July, 2023 – December, 2023
Vice Chair, MSIS Department	July, 2020 – June, 2023
Interim Vice Chair, MSIS Department	July, 2014 – Jan, 2015
Member, Graduate Faculty, ECE Department	September 2021 – present
Associate Member, Graduate Faculty, CS Department	October 2021 – present
Member, Rutgers AI & Pandemics Initiative	August 2020 – present
Member, WINLab	August 2023 – present

Yale University

Visiting Research Scientist, Biomedical Informatics and Data Science, School of Medicine — January, 2023 – December, 2023

Princeton University

Visiting Fellow, Electrical & Computer Engineering Department — September, 2015 – July, 2016

NEC C&C Research Labs — May, 2002 – August, 2002

Summer Intern as part of the Content Aware Networks group. Examined security issues in content aware networks. Mentor: Wen-Syan Li

Microsoft Corporation — May, 2000 – August, 2000

Summer Intern as part of the Trident Team in the Internet Explorer Group. Core responsibility was to add W3C Document Object Model (DOM) Level 1 support to IE 6.0.

Recognition by Professional Societies

- Fellow, International Federation of for Information Processing (IFIP), 2023

- Fellow, Asia-Pacific Artificial Intelligence Association (AAIA), 2023
- Fellow, American Association for the Advancement of Science (AAAS), 2022
- Fellow, Institute of Electrical and Electronics Engineers (IEEE), 2021
- Distinguished Scientist, Association for Computing Machinery (ACM), 2015

HONORS AND AWARDS

- US-UK Privacy Enhancing Technologies Challenge, Financial Crime Track, 1st place (Team Scarlet-Pets), 2023
- Rutgers-Newark Research Impact Award, 2023
- IEEE Golden Core Recognition, 2023
- Rutgers Board of Trustees Award for Excellence in Research, 2022
- NIGMS Outstanding Investigator Award, 2020
- IFIP WG 11.3 Outstanding Research Award, 2018
- Dean's Meritorious Research Award, Rutgers Business School, 2016
- Rutgers Board of Trustees Research Fellowship for Scholarly Excellence, 2010
- Junior Faculty Research Award (One Per School), Rutgers Business School, 2009
- NSF Career Award, 2008
- University Nominee (One Per University), Microsoft New Faculty Fellowship, Rutgers University, 2005
- Best/Outstanding Paper Awards
    1. 2022 Best Paper Award, IEEE Intelligent Systems for the article "Intelligent Pandemic Surveillance via Privacy-Preserving Crowdsensing."
    2. Best Research Paper (Runner Up), 22nd Annual International Conference on Digital Government Research (dg.o 2021)
    3. IDRBT Best Practice Paper, 15th International Conference on Information Systems Security (ICISS 2019)
    4. Best Research Paper (Runner Up), 18th Annual International Conference on Digital Government Research (dg.o 2017)
    5. Honourable mention paper, COMSNETS 2017 Social Networking Workshop
    6. Best Student Paper Award, 30th Annual IFIP WG 11.3 Working Conference on Data and Applications Security and Privacy (DBSec '16)
    7. 12th International Conference on Security and Cryptography (SECRYPT), 2015
    8. The Clinical Research Informatics (CRI) Distinguished Paper Award (CRI 2013)
    9. Nominated, Best Research Paper, 14th Annual International Conference on Digital Government Research (dg.o 2013)
    10. Literati Network Award for the article "Resource Sharing using DHS-UICDS Framework for Incident Management", published in Transforming Government: People, Process and Policy, 2013
    11. Runner up, Best Student Paper Award, 27th Annual IFIP WG 11.3 Working Conference on Data and Applications Security and Privacy (DBSec '13)
    12. Best Poster or Demo Award, 12th Annual International Conference on Digital Government Research (dg.o 2011)
    13. 21st IEEE International Conference on Data Engineering, 2005
    14. Runner Up for Best Paper Award, 9th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (KDD), 2003

RESEARCH FUNDING

- Multiple Principal Investigator (MPI), "Accelerating Genomic Data Sharing and Collaborative Research with Privacy Protection", $3,211,323, NIH, September 1, 2023 - May 31, 2028. (Erman Ayday, Case Western Reserve University, and Xiaoqian Jiang, University of Texas, MPIs.)

- Principal Investigator, "EAGER: Foundations for the Systematic Study of Synthetic Data", $250,000, NSF, October 1, 2023 - September 30, 2025.

- Principal Investigator, "Authenticated Machine Learning", $100,000, CISCO Research, October 1, 2021 - December 31, 2022.

- Principal Investigator, "Workshop: Establishing the Vision and Creating a Roadmap for Security, Privacy and Ethics Research in Healthcare", $87,982, NSF, October 1, 2020 - September 30, 2023.

- Principal Investigator, "RAPID: Privacy-Preserving Crowdsensing of COVID-19 and its Sociological and Epidemiological Implications", $199,597, NSF, May 1, 2020 - April 31, 2021.

- Principal Investigator, "Developing Novel Technologies That Ensure Privacy And Security In Biomedical Data Science Research", $1,918,740, NIH, January 1, 2020 - December 31, 2024. Outstanding Investigator Award. (No Co-PI or Co-Is.)

- Co-Principal Investigator, "IUCRC Phase I Rutgers, Newark: Center for Accelerated Real Time Analytics (CARTA)", $750,000, NSF, June 1, 2018 - May 31, 2023. (Vijayalakshmi Atluri, PI)

- Co-Principal Investigator, Supplement, "I/UCRC: Center for Hybrid Multicore Productivity Research (CHMPR) - Rutgers Site", $50,000, NSF, August 21, 2017 - July 31, 2021. (Nabil Adam, PI)

- Principal Investigator, "Secure and PrivAte Collaborative EnvironmentS (SPACES) for biomedical analytics", $1,072,401, NIH, January 1, 2017 - December 31, 2020.

- Principal Investigator, "TWC SBE: Medium: Collaborative: Building a Privacy-Preserving Social Networking Platform from a Technological and Sociological Perspective", $323,504, NSF, September 1, 2016 - August 31, 2019.

- Co-Principal Investigator, "I/UCRC: Center for Hybrid Multicore Productivity Research (CHMPR) - Rutgers Site", $300,000, NSF, August 1, 2016 - July 31, 2021. (Nabil Adam, PI)

- Principal Investigator, "Codec - Composition and Management of e-Government Processes in the Cloud of Public Services", $187,905, National Academies of Sciences, Engineering, and Medicine, September 15, 2015 - September 14, 2018. (Nabil Adam, Former PI)

- Internal Grant: Principal Investigator, "Addressing the cardiovascular disease challenge: building personalized network oriented models for understanding and predicting cardiovascular diseases", Chancellors's Seed Grant Program, $75,000, July 2015 - June 2016.

- Principal Investigator, "TWC: Small: Privacy Preserving Outlier Detection and Recognition", $508,474, NSF, September 15, 2014 – September 14, 2016. (No Co-PIs).

- Principal Investigator, "TUES: Type 1: INSPIRE: INStructional materials for PrIvacy Research and Education", $199,681, NSF, August 15, 2012 – July 31, 2014. (No Co-PIs).

- Principal Investigator, "TC: Small: Collaborative Research: Formal Security Analysis of Access Control Models and Extensions", $329,958, NSF, August 15, 2010 - July 31, 2015. (Vijayalakshmi Atluri, Former PI)

- Co-Principal Investigator, "Homeland Defense Research & Development Effort", $498,430, Department of Homeland Security, January 2010 - December 2011. (Vijayalakshmi Atluri, PI).

- Co-Principal Investigator, "DG: Secure Agency Interoperation for Effective Data Mining in Border Control and Homeland Security Applications", Supplement, $50,000, NSF, October 2008 - September 2009. (Nabil R. Adam, PI).

- Principal Investigator, "Collaborative Optimization with Limited Information Disclosure", $450,000, NSF Career Award 2008, February 2008 - January 2013 (No Co-PIs).

- Co-Principal Investigator, "Improving Business Knowledge Management & Analysis Through the use of the RFID Technology and Semantic Web Services", $566,000, SAP Corporation, August 2007 - June 2009.
- Co-Principal Investigator, "Improving Business Knowledge Management and Analysis Through the use of Semantic Web Services and RFID Technology", SAP Research Labs, $420,000, June 2004 - June 2007. (Nabil R. Adam, PI).
- Internal Grant: Co-Principal Investigator, "The Rutgers University Research Initiative on Cybersecurity Economics (RICE)", $60,000, Rutgers Academic Excellence Fund, 2008-2009. (Rebecca Wright, PI).
- Internal Grant: Co-Principal Investigator, "Information Technology for Emergency Management (iTeam)", $40,000, Rutgers Academic Excellence Fund, 2007-2008. (Nabil R. Adam, PI).
- Internal Grant: Principal Investigator, "Privacy Preserving Optimization", Rutgers FOM Research Grant, $1,500, July 2006 - June 2007.
- Internal Grant: Principal Investigator, "Privacy Preserving Data Analysis", Rutgers FOM Research Grant, $9,500, July 2005 - June 2006.

MONOGRAPH

1. "Privacy Preserving Data Mining". **Jaideep Vaidya**, Michael Zhu and Chris Clifton, Monograph, Series on Advances in Information Security, Springer-Verlag, November 2005, ISBN: 0-387-25886-8.

POPULAR SCIENCE ARTICLE

1. "A Critical Look at AI-Generated Software: Coding with the New AI Tools is Both Irresistible and Dangerous.", **Jaideep Vaidya**, and Hafiz Asif. IEEE Spectrum 60.7 (2023): 34-39. (Feature Article)

JOURNAL ARTICLES (AUTHORS LISTED IN ORDER OF CONTRIBUTION)

1. "Blockchain Based Auditable Access Control For Business Processes With Event Driven Policies", Ahmed Akhtar, Masoud Barati, Basit Shafiq, Omer Rana, Ayesha Afzal, **Jaideep Vaidya**, Shafay Shamail, IEEE Transactions on Dependable and Secure Computing, accepted, 2024.

2. "Engravings, Secrets, and Interpretability of Neural Networks", Nathaniel Hobbs, Periklis A. Papakonstantinou, **Jaideep Vaidya**, IEEE Transactions on Emerging Technologies in Computing, accepted, 2024.

3. "Blockchain-based Shared Data Integrity Auditing and Deduplication" Ying Miao, Keke Gai, Liehuang Zhu, Kim-Kwang Raymond Choo, **Jaideep Vaidya**, IEEE Transactions on Dependable and Secure Computing, accepted, 2023.

4. "Efficiently Supporting Attribute-based Access Control in Linux", H. O. Sai Varshith, Shamik Sural, **Jaideep Vaidya**, Vijayalakshmi Atluri, IEEE Transactions on Dependable and Secure Computing, accepted, 2023.

5. "A Role-Based Administrative Model for Administration of Heterogeneous Access Control Policies and its Security Analysis", Mahendra Singh, Shamik Sural, **Jaideep Vaidya**, Vijayalakshmi Atluri, Information Systems Frontiers, accepted, 2021.

6. "Orchestration and Management of Adaptive IoT-centric Distributed Applications", Sehrish Amjad, Ahmed Akhtar, Ayesha Afzal, Basit Shafiq, **Jaideep Vaidya**, Shafay Shamail, Omer Rana, Muhammad Ali, IEEE IoT Journal, Special Issue on IoT Systems for Extreme Environments, 11(3), 2024.

7. "Privacy-Preserving Federated Genome-wide Association Studies via Dynamic Sampling", Xinyue Wang, Leonard Dervishi, Wentao Li, Erman Ayday, Xiaoqian Jiang, **Jaideep Vaidya (Senior Author)**, Bioinformatics, 39(10), October 2023.

8. "Identifying Anomalies while Preserving Privacy", Hafiz Asif, **Jaideep Vaidya**, Periklis A. Papakonstantinou, IEEE Transactions on Knowledge and Data Engineering, 35(12), pp. 12264 - 12281, 2023.

9. "Enabling Attribute-based Access Control in NoSQL Databases", Eeshan Gupta, Shamik Sural, **Jaideep Vaidya**, Vijayalakshmi Atluri, IEEE Transactions on Emerging Technologies in Computing, 11(1), pp. 208-223, 2023.

10. "Collaborative Business Process Fault Resolution in the Services Cloud", Muhammad Adeel Zahid, Basit Shafiq, **Jaideep Vaidya**, Ayesha Afzal, Shafay Shamail, IEEE Transactions on Services Computing, 16(1), pp. 162-176, 2023.

11. "A Generalized Framework for Preserving Both Privacy and Utility in Data Outsourcing", Shangyu Xie, Meisam Mohammady, Han Wang, Yuan Hong, Lingyu Wang, **Jaideep Vaidya**, IEEE Transactions on Knowledge and Data Engineering, 35(1), pp. 1-15, 2023.

12. "Empowering Business Students: The Rise of Experiential Learning, Collaborative Mentoring, and Data Science", Lei Lei, Can Uslay, **Jaideep Vaidya**, Rutgers Business Review (2023), Vol. 8, No. 1, pp.1-15.

13. "Intelligent Pandemic Surveillance via Privacy-Preserving Crowdsensing", Hafiz Asif, Periklis A. Papakonstantinou, Stephanie Shiau, Vivek Singh, **Jaideep Vaidya**, IEEE Intelligent Systems, 37(4), pp. 88-96, 2022.

14. "A Framework for Dynamic Composition and Management of Emergency Response Processes", Abeer Elahraf, Ayesha Afzal, Ahmed Akhtar, Basit Shafiq, **Jaideep Vaidya**, Shafay Shamail, Nabil Adam, IEEE Transactions on Services Computing, 15(4), pp. 2018-2031, 2022.

15. "Analyzing social media messages of public sector organizations utilizing sentiment analysis and topic modeling", Ussama Yaqub, Soon Ae Chun, Vijayalakshmi Atluri, **Jaideep Vaidya**, Information Polity, 26(4), pp. 375-390, 2021.

16. "Enabling Workforce Optimization in Constrained Attribute Based Access Control Systems", Arindam Roy, Shamik Sural, Arun Majumdar, **Jaideep Vaidya**, Vijayalakshmi Atluri, IEEE Transactions on Emerging Technologies in Computing, 9(4), pp. 1901-1913, 2021.

17. "Efficient Verification for Outsourced Genome-wide Association Studies", Xinyue Wang, Xiaoqian Jiang, **Jaideep Vaidya**, Journal of Biomedical Informatics, 117, 103714, pp. 1-9, 2021.

18. "ASSEMBLE: Attribute and Structure based Service Mapping Approach for Collaborative Business Process Development", Ayesha Afzal, Basit Shafiq, Shafay Shamail, Abeer Elahraf, **Jaideep Vaidya**, Nabil Adam, IEEE Transactions on Services Computing, 14(2), March-April 2021.

19. "Optimal Employee Recruitment in Organizations under Attribute Based Access Control", Arindam Roy, Shamik Sural, Arun Majumdar, **Jaideep Vaidya**, Vijayalakshmi Atluri, ACM Transactions on Management Information Systems, January 2021, Article No.: 6, pp 1–24.

20. "Efficient Determination of Equivalence for Encrypted Data", Jason Doctor, **Jaideep Vaidya**, Xiaoqian Jiang, Shuang Wang, Lisa M. Schilling, Toan Ong, Michael E. Matheny, Lucila Ohno-Machado, Daniella Meeker, Elsevier Computers and Security, 97, pp 101939, October, 2020.

21. "A guide for private outlier analysis", Hafiz Asif, Periklis Papakonstantinou, **Jaideep Vaidya**, in IEEE Letters of the Computer Society, 3(1), pp. 29-33, 1 Jan.-June 2020.

22. "Algorithms and Applications to Weighted Rank-One Binary Matrix Factorization", Haibing Lu, Xi Chen, Junmin Shi, **Jaideep Vaidya**, Vijayalakshmi Atluri, Yuan Hong, Wei Huang, ACM Transactions on Management Information Systems, 11(2), Article 7 (May 2020), 33 pages.

23. "Location-based Sentiment Analyses and Visualization of Twitter Election Data", Ussama Yaqub, Nitesh Sharma, Rachit Pabreja, Soon Ae Chun, Vijayalakshmi Atluri and **Jaideep Vaidya**, Digital Government: Research and Practice (DGOV), 1(2), Article 14 (April 2020), 19 pages.

24. "Managing Attribute-Based Access Control Policies in a Unified Framework using Data Warehousing and In-Memory Database", Mahendra Singh, Shamik Sural, **Jaideep Vaidya**, Vijayalakshmi Atluri, Computers & Security, 86, pp. 183-205, September 2019.

25. "Deploying ABAC policies using RBAC Systems", Gunjan Batra, Vijayalakshmi Atluri, **Jaideep Vaidya**, Shamik Sural, Journal of Computer Security, vol. 27, no. 4, pp. 483-506, 2019.

26. "Policy Adaptation in Hierarchical Attribute-Based Access Control Systems", Saptarshi Das, Shamik Sural, **Jaideep Vaidya**, Vijayalakshmi Atluri, ACM Transactions on Internet Technology, Volume 19 Issue 3, September 2019.

27. "Security Analysis of ABAC under an Administrative Model", Sadhana Jha, Shamik Sural, Vijayalakshmi Atluri, **Jaideep Vaidya**, IET Information Security, 13(2): 96-103, 2019.

28. "HyPE: A Hybrid Approach toward Policy Engineering in Attribute-Based Access Control", Saptarshi Das, Shamik Sural, **Jaideep Vaidya**, Vijayalakshmi Atluri, IEEE Letters of the Computer Society, 1(2), pp. 25-29, 2018.

29. "Towards Designing Robust CAPTCHAs", David Lorenzi, Emre Uzun, **Jaideep Vaidya**, Shamik Sural, Vijayalakshmi Atluri, Journal of Computer Security, 26(6), 731-760, 2018.

30. "Differentially Private Outlier Detection in a Collaborative Environment", Hafiz Asif, Tanay Talukdar, **Jaideep Vaidya**, Basit Shafiq, Nabil Adam, International Journal of Cooperative Information Systems, 27(3), September 2018.

31. "Perfectly Secure and Efficient Two-party Electronic Health Record Linkage", Feng Chen, Xiaoqian Jiang, Shuang Wang, Lisa Schilling, Daniella Meeker, Toan Ong, Michael E. Matheny, Jason N. Doctor, Lucila Ohno-Machado, **Jaideep Vaidya (Senior Author)**, IEEE Internet Computing, 22(2), Mar/April 2018.

32. "Specification and Verification of Separation of Duty Constraints in Attribute based Access Control", Sadhana Jha, Shamik Sural, Vijayalakshmi Atluri, **Jaideep Vaidya**, IEEE Transactions on Information Forensics and Security, 13(4), April 2018, pp. 897-911.

33. "A Side-channel Attack on Smartphones: Deciphering Key Taps using Built-in Microphones", Haritabh Gupta, Shamik Sural, Vijayalakshmi Atluri, **Jaideep Vaidya**, Journal of Computer Security, 26(2), January 2018, pp. 255-281.

34. "Analysis of Political Discourse on Twitter in the Context of the 2016 US Presidential Elections", Ussama Yakub, Soon Chun, Vijayalakshmi Atluri, **Jaideep Vaidya**, Government Information Quarterly, 34(4), December 2017, pp. 613-626.

35. "Migrating from RBAC to Temporal RBAC", Barsha Mitra, Shamik Sural, **Jaideep Vaidya**, Vijayalakshmi Atluri, IET Information Security, 11(5), September 2017, pp. 294 – 300.

36. "Privacy-Preserving Item-based Recommendations over Partitioned Data with Overlaps", Ibrahim Yakut and **Jaideep Vaidya**, International Journal of Business Information Systems, 25(3), pp. 336-351, 2017.

37. "On Optimal Employee Assignment in Constrained Role Based Access Control Systems", Arindam Roy, Shamik Sural, Arun Majumdar, **Jaideep Vaidya**, Vijayalakshmi Atluri, ACM Transactions on Management Information Systems, 7(4), pp. 10:1–10:24, January 2017.

38. "Mining Temporal Roles using Many-Valued Concepts", Barsha Mitra, Shamik Sural, **Jaideep Vaidya**, Vijayalakshmi Atluri, Computers & Security, 60, pp. 79 – 94, July, 2016.

39. "A Survey of Role Mining", Barsha Mitra, Shamik Sural, **Jaideep Vaidya**, Vijayalakshmi Atluri, ACM Computing Surveys, 48(4), pp. 50:1–50:37, 2016.

40. "Accurate and Efficient Query Clustering via Top Ranked Search Results", Yuan Hong, **Jaideep Vaidya**, Haibing Lu, Wen Ming Liu, Web Intelligence, 14(2), pp. 119–138, 2016.

41. "Using classification for role-based access control management", Nazia Badar, **Jaideep Vaidya**, Vijayalakshmi Atluri, Nino Verde, Janice Warner, International Journal of Technology, Policy and Management, 16(1), pp. 45-78, 2016.

42. "Minimizing Organizational User Requirement while Meeting Security Constraints", Arindam Roy, Shamik Sural, Arun Kumar Majumdar, **Jaideep Vaidya**, Vijayalakshmi Atluri, ACM Transactions on Management Information Systems, 6(3), pp. 12:1-12:25, October, 2015.

43. "PEER: A Framework for Public Engagement in Emergency Response", David Lorenzi, Soon Chun, **Jaideep Vaidya**, Vijayalakshmi Atluri, Nabil Adam, International Journal of E-Planning Research, 4(3) pp. 29-46, 2015.

44. "Collaborative Search Log Sanitization: Toward Differential Privacy and Boosted Utility", Yuan Hong, **Jaideep Vaidya**, Haibing Lu, Panagiotis Karras, Sanjay Goel, IEEE Transactions on Dependable and Secure Computing, 12(5), pp. 504-518, 2015.

45. "The Generalized Temporal Role Mining Problem", Barsha Mitra, Shamik Sural, Vijayalakshmi Atluri, **Jaideep Vaidya**, Journal of Computer Security, 23(1), pp. 31-58, 2015.

46. "Security Analysis for Temporal Role Based Access Control", Emre Uzun, Vijayalakshmi Atluri, **Jaideep Vaidya**, Shamik Sural, Anna Lisa Ferrara, Gennaro Parlato, P. Madhusudan, Journal of Computer Security, 22(6), pp. 961 - 996, 2014.

47. "Statistical Database Auditing Without Query Denial Threat", Haibing Lu, **Jaideep Vaidya**, Vijayalakshmi Atluri, Yingjiu Li, INFORMS Journal on Computing, 27(1), pp. 20-34, 2015.

48. "Meeting Cardinality Constraints in Role Mining", Pullamsetty Harika, Marreddy Nagajyothi, John C. John, Shamik Sural, **Jaideep Vaidya**, and Vijayalakshmi Atluri, IEEE Transactions on Dependable and Secure Computing, 12(1), pp. 71 - 84, 2015.

49. "Opinions of People: Factoring in Privacy and Trust", Anirban Basu, **Jaideep Vaidya**, Juan Camilo Corena, Shinsaky Kiyomoto, Stephen Marsh, Guibing Guo, Jie Zhang, Yutaka Miyake, ACM SIGAPP Applied Computing Review, 14(3), pp. 7-21, September, 2014.

50. "A Random Decision Tree Framework for Privacy-preserving Data Mining", **Jaideep Vaidya**, Basit Shafiq, Wei Fan, Danish Mehmood, David Lorenzi, IEEE Transactions on Dependable and Secure Computing, 11(5), pp. 399-411, 2014.

51. "Security Analysis of Temporal RBAC under an Administrative Model", Sadhana Jha, Shamik Sural, **Jaideep Vaidya**, and Vijayalakshmi Atluri, Computers & Security, 46, pp. 154-172, October 2014.

52. "A Survey of Privacy-aware Supply Chain Collaboration: From Theory to Applications", Yuan Hong, **Jaideep Vaidya**, Shengbin Wang, American Accounting Association Journal of Information Systems, Spring 2014, 28(1), pp. 243-268.

53. "Private Searching on Streaming Data Based on Keyword Frequency", Xun Yi, Elisa Bertino, **Jaideep Vaidya**, Chaoping Xing, IEEE Transactions on Dependable and Secure Computing, 11(2), pp. 155-167, March, 2014.

54. "Inappropriate Access Detection for Electronic Health Records Using Collaborative Filtering", Aditya Menon, Xiaoqian Jiang, Jihoon Kim, **Jaideep Vaidya**, Lucila Ohno-Machado, Machine Learning Journal special issue: Machine Learning for Science and Society, 95(1), pp. 87-101, 2014.

55. "An Optimization Framework for Role Mining", Haibing Lu, **Jaideep Vaidya**, and Vijayalakshmi Atluri, Journal of Computer Security, 22(1), pp. 1-31, January, 2014.

56. "Enhancing the Government Service Experience through QR Codes on Mobile Platforms", David Lorenzi, **Jaideep Vaidya**, Soon Chun, Basit Shafiq, Ghulam Nabi, and Vijayalakshmi Atluri, Government Information Quarterly, 31(1), pp. 6-16, January, 2014.

57. "An Inference-proof Approach to Privacy-preserving Horizontally Partitioned Linear Program", Yuan Hong and **Jaideep Vaidya**, Optimization Letters, 8(1), pp. 267-277, January, 2014.

58. "AMTRAC: An Administrative Model for Temporal Role-based Access Control", Manisha Sharma, Shamik Sural, **Jaideep Vaidya**, Vijayalakshmi Atluri, Computers & Security, Volume 39 Part B, pp. 201-218, 2013.

59. "Privacy preserving collaborative filtering for SaaS enabling PaaS clouds", Anirban Basu, **Jaideep Vaidya**, Hiroaki Kikuchi, Theo Dimitrakos, and Srijith Nair, Journal of Cloud Computing: Advances, Systems and Applications, 1:8, 2012.

60. "Secure and Efficient Distributed Linear Programming", Yuan Hong, **Jaideep Vaidya**, and Haibing Lu, in Journal of Computer Security, 20(5), pp. 583-634, 2012, IOS Press, NL.

61. "Constraint-Aware Role Mining Via Extended Boolean Matrix Decomposition", Haibing Lu, **Jaideep Vaidya**, Vijayalakshmi Atluri, and Yuan Hong, IEEE Transactions on Dependable and Secure Computing, Special Issue on Data & Application Security (DAS), 9(5), pp. 655-669, 2012, IEEE Computer Society, Los Alamitos, CA.

62. "Semantics Based Automated Service Discovery", Aabhas Paliwal, Basit Shafiq, **Jaideep Vaidya**, Hui Xiong, and Nabil Adam, in IEEE Transactions on Services Computing, 5(2), 2012, pp. 260-275, IEEE Computer Society, Los Alamitos, CA.

63. "Structure-Aware Graph Anonymization", Xiaoyun He, **Jaideep Vaidya**, Basit Shafiq, Nabil Adam, and Vijay Atluri, Web Intelligence and Agent Systems, 10(2), pp. 193-208, April, 2012, IOS Press, NL.

64. "Resource Sharing using DHS-UICDS Framework for Incident Management", Vijayalakshmi Atluri, Basit Shafiq, Soon Chun, Ghulam Nabi, and **Jaideep Vaidya**, Transforming Government: People, Process and Policy, 6(1), March, 2012, pp. 41-61, Emerald Group Publishing.

65. "Efficient Privacy-Preserving Collaborative Filtering Based on the Weighted Slope One Predictor", Anirban Basu, **Jaideep Vaidya**, and Hiroaki Kikuchi, in the Journal of Internet Services and Information Security (JISIS), 1(4), November 2011, pp. 26-46.

66. "A Profile Anonymization Model for Location Based Services", Heechang Shin, **Jaideep Vaidya**, and Vijayalakshmi Atluri, Journal of Computer Security, 19(5), 2011, pp. 795-833, IOS Press, NL.

67. "Secure Construction and Publication of Contingency Tables from Distributed Data", Xiaoyun He, Haibing Lu, **Jaideep Vaidya**, and Nabil Adam, Journal of Computer Security, 19(3), pp. 453-484, May 2011, IOS Press, NL.

68. "Similar Document Detection with Limited Information Disclosure", Mummoorthy Murugesan, Wei Jiang, Chris Clifton, Luo Si, and **Jaideep Vaidya**, International Journal on Very Large Data Bases (VLDB Journal), 19(4), pp. 457-475, August, 2010, VLDB Endowment.

69. "Privacy Preserving Integration of Health Care Data", Xiaoyun He, **Jaideep Vaidya**, Basit Shafiq, Nabil Adam, Thomas White, International Journal of Computational Models and Algorithms in Medicine, 1(2), special issue on Privacy and Security Issues for Medical Data, 2010, pp. 22-36, IGI Global.

70. "Spatial neighborhood based anomaly detection in sensor datasets", Vandana Janeja, Nabil R. Adam, Vijayalakshmi Atluri and **Jaideep Vaidya**, in Data Mining and Knowledge Discovery, special issue on Outlier Detection, 20(2), March 2010, pp. 221-258, Springer.

71. "A Unified Index Structure for Efficient Enforcement of Spatiotemporal Authorizations", Vijayalakshmi Atluri, Qi Guo, Heechang Shin, and **Jaideep Vaidya**, International Journal of Information and Computer Security, 4(2), August 2010, pp. 118 - 151, Inderscience.

72. "Role Engineering via Prioritized Subset Enumeration", **Jaideep Vaidya**, Vijayalakshmi Atluri, Janice Warner, and Qi Guo, IEEE Transactions on Dependable and Secure Computing, 7(3), pp. 300-314, July-September, 2010, IEEE Computer Society.

73. "The Role Mining Problem: A Formal Perspective", **Jaideep Vaidya**, Vijayalakshmi Atluri, and Qi Guo, ACM Transactions on Information Systems Security, 13(3), pp. 27:1-27:31, July, 2010, ACM. (Invited extension of SACMAT '07 paper).

74. "Anonymization Models for Directional Location Based Service Environments", Heechang Shin, **Jaideep Vaidya**, and Vijayalakshmi Atluri, Computers and Security, 29(1), pp. 59-73, February 2010, Elsevier.

75. "Privacy-Preserving Indexing of Documents on the Network", Mayank Bawa, Roberto J. Bayardo, Rakesh Agrawal, and **Jaideep Vaidya**, The International Journal on Very Large Data Bases (VLDB Journal), 18(4), pp. 837-856, 2009, VLDB Endowment.

76. Edge-RMP: Minimizing administrative assignments for role-based access control, **Jaideep Vaidya**, Vijayalakshmi Atluri, Qi Guo, and Haibing Lu, Journal of Computer Security, 17(2), pp. 211-235, 2009, IOS Press, NL.

77. "Privacy-Preserving Kth Element Score over Vertically Partitioned Data", **Jaideep Vaidya** and Chris Clifton, IEEE Transactions on Knowledge and Data Engineering, 21(2), pp.253-258, 2009, IEEE Computer Society.

78. "Privacy-Preserving Decision Trees over Vertically Partitioned Data", **Jaideep Vaidya**, Chris Clifton, Murat Kantarcioglu and A. Scott Patterson, ACM Transactions on Knowledge Discovery in Data, 2(3), October 2008, ACM.

79. "Efficient Security Policy Enforcement for the Mobile Environment", Vijayalakshmi Atluri, Heechang Shin, and **Jaideep Vaidya**, Journal of Computer Security, 16(4), pp. 439-475, 2008, IOS Press, NL.

80. "Privacy Preserving Naïve Bayes Classification". **Jaideep Vaidya**, Murat Kantarcioglu and Chris Clifton, International Journal on Very Large Data Bases, 17(4), pp. 879-898, July, 2008 Springer-Verlag, GmbH.

81. "Privacy Preserving SVM Classification", **Jaideep Vaidya**, Hwanjo Yu and Xiaoqian Jiang, in Knowledge and Information Systems, Springer-Verlag, 14(2), pp. 161-178, February, 2008.

82. "An Approach to Identifying Beneficial Collaboration Securely in Decentralized Logistics Systems". Chris Clifton, Ananth Iyer, Richard Cho, Wei Jiang, Murat Kantarcioglu and **Jaideep Vaidya**, Manufacturing & Service Operations Management, 10(1), Winter 2008, pp. 108 – 125, INFORMS, Linthicum, Maryland.

83. "Secure Set Intersection Cardinality with Application to Association Rule Mining". **Jaideep Vaidya** and Chris Clifton, Journal of Computer Security, 13(4), IOS Press, November 2005, pp. 593 - 622.

84. "Privacy-Preserving Data Mining: Why, How, and When?". **Jaideep Vaidya** and Chris Clifton, IEEE Security & Privacy, New York, NY, November/December 2004.

85. "Tools for Privacy Preserving Distributed Data Mining". Chris Clifton, Murat Kantarcioglu, **Jaideep Vaidya**, Xiaodong Lin and Michael Zhu, in ACM SIGKDD Explorations 4(2), December 2002. Invited paper.

REFEREED CONFERENCE AND WORKSHOP PAPERS – AUTHORS LISTED IN ORDER OF CONTRIBUTION
(Acceptance rate ≤ 30% listed)

1. Vision Paper:"Ensuring Trust in Genomics Research", Erman Ayday, **Jaideep Vaidya**, Xiaoqian Jiang, Amalio Telenti, in Proceedings of the Fifth IEEE International Conference on Trust, Privacy and Security in Intelligent Systems, and Applications (TPS-ISA), November 1-3, 2023, Atlanta, GA, USA.

2. Vision Paper: "SAFE-PASS: Stewardship, Advocacy, Fairness and Empowerment in Privacy, Accountability, Security, and Safety for Vulnerable Groups", Indrajit Ray, Bhavani Thuraisingham, **Jaideep Vaidya**, Sharad Mehrotra, Vijayalakshmi Atluri, Indrakshi Ray, Murat Kantarcioglu, Ramesh Raskar, Babak Salimi, Steve Simske, Nalini Venkatasubramanian and Vivek Singh, in Proceedings of the 2023 ACM Symposium on Access Control Models and Technologies (SACMAT), June 7-9, 2023, Trento, Italy.

3. "Privacy Preserving Population Stratification for Collaborative Genomic Research", Leonard Dervishi, Wenbiao Li, Anisa Halimi, Xiaoqian Jiang, **Jaideep Vaidya**, Erman Ayday, in Proceedings of the 31st annual international conference on Intelligent Systems for Molecular Biology (ISMB) / 22nd Annual European Conference on Computational Biology (ECCB), July 23-27, 2023. (Paper Acceptance rate = 60/336 = 17.9%)

4. "Preserving Observable and Missing Data Distribution in Synthetic Data", Xinyue Wang, Hafiz Asif, **Jaideep Vaidya**, in Proceedings of the ACM Web Conference 2023, April 30-May 4, 2023, Austin, TX, USA. (Paper Acceptance rate = 365/1900 = 19.2%)

5. "Poster: Facilitating Federated Genomic Data Analysis by Identifying Record Correlations while Ensuring Privacy", Leonard Dervishi, Xinyue Wang, Wentao Li, Anisa Halimi, **Jaideep Vaidya**, Xiaoqian Jiang, Erman Ayday, in Proceedings of the 2023 Network and Distributed System Security (NDSS) Symposium, February 27 – March 3, 2023, San Diego, California.

6. "Poster: Privacy Preserving Population Stratification for Collaborative Genomic Research" Leonard Dervishi, Wenbiao Li, Anisa Halimi, Xiaoqian Jiang, **Jaideep Vaidya**, Erman Ayday, in Proceedings of the 2023 Network and Distributed System Security (NDSS) Symposium, February 27 – March 3, 2023, San Diego, California.

7. "Efficient federated kinship relationship identification", Xinyue Wang, Leonard Dervishi, Wentao Li, Xiaoqian Jiang, Erman Ayday, **Jaideep Vaidya**, (senior author), in Proceedings of the AMIA 2023 Informatics Summit, 2023.

8. "Impact of Dimensionality Reduction on Outlier Detection: an Empirical Study", Vivek Vaidya, **Jaideep Vaidya**, in Proceedings of the 2022 IEEE 4th International Conference on Trust, Privacy and Security in Intelligent Systems, and Applications (TPS-ISA), December 15-17, 2022, pp. 150-159.

9. "Facilitating Federated Genomic Data Analysis by Identifying Record Correlations while Ensuring Privacy", Leonard Dervishi, Xinyue Wang, Wentao Li, Anisa Halimi, **Jaideep Vaidya**, Xiaoqian Jiang, Erman Ayday, in Proceedings of the AMIA 2022 Annual Symposium, November 05 - 09, 2022, Washington DC, USA.

10. "PRIVEE: A Visual Analytic Workflow for Proactive Privacy Risk Inspection of Open Data", Kaustav Bhattacharjee, Akm Zahirul Islam, **Jaideep Vaidya**, Aritra Dasgupta, in Proceedings of the 19th IEEE Symposium on Visualization for Cyber Security (VizSec 2022), October 19, 2022, Oklahoma City, USA.

11. "A Study of Users' Privacy Preferences for Data Sharing on Symptoms-Tracking/Health App", Hafiz Asif and **Jaideep Vaidya**, in Proceedings of the 20th Workshop on Privacy in the Electronic Society (WPES), in collaboration with ACM CCS, 2022, Los Angeles, CA. Short paper. (Paper Acceptance rate = 20/59 = 33.89%)

12. "An Integrated Framework for Fault Resolution in Business Processes", Muhammad Adeel Zahid, Ayesha Afzal, Ahmed Akhtar, Basit Shafiq, **Jaideep Vaidya**, Shafay Shamail, in Proceedings of the IEEE International Conference on Web Services (ICWS), July 11-16, 2022, Barcelona, Spain. (Full Paper Acceptance rate = 22/157 = 14%)

13. "Towards Supporting Attribute-Based Access Control in Hyperledger Fabric Blockchain", Amshumaan Pericherla, Proteet Paul, Shamik Sural, **Jaideep Vaidya**, Vijay Atluri, in Proceedings of the 37th International Conference on ICT Systems Security and Privacy Protection – IFIP SEC 2022, 13–15 June 2022.

14. "Privacy-Preserving and Efficient Verification of the Outcome in Genome-Wide Association Studies", Anisa Halimi, Leonard Dervishi, Erman Ayday, Apostolos Pyrgelis, Juan Ramon Troncoso-Pastoriza, Jean-Pierre Hubaux, Xiaoqian Jiang, **Jaideep Vaidya**, in Proceedings of the 22nd Privacy Enhancing Technologies Symposium, July 11–15, 2022, Sydney, Australia and Online. (Full Paper Acceptance rate = 128/534 = 24%)

15. "PAMMELA: Policy Administration Methodology using Machine Learning", Barsha Mitra, Varun Gumma, Soumyadeep Dey, Pratik Patel, Sourabh Suman, Saptarshi Das, **Jaideep Vaidya**, in Proceedings of the 19th International Conference on Security and Cryptography (SECRYPT 2022), July 11-13, Lisbon, Portugal.

16. "BP-DEBUG: A Fault Debugging and Resolution Tool for Business Processes", Muhammad Adeel Zahid, Basit Shafiq, Ayesha Afzal, **Jaideep Vaidya**, Shafay Shamail, Demo Paper, in Proceedings of the 42nd IEEE International Conference on Distributed Computing Systems, July 10 - 13, 2022, Bologna, Italy.

17. "Contemporaneous Update and Enforcement of ABAC Policies", Samir Talegaon, Gunjan Batra, Vijayalakshmi Atluri, Shamik Sural, **Jaideep Vaidya**, in Proceedings of the ACM Symposium on Access Control Models and Technologies (SACMAT), June 8-10, 2022.

18. "Poster: Enabling Attribute-Based Access Control in Linux Kernel", H.O. Sai Varshith, Shamik Sural, **Jaideep Vaidya**, Vijay Atluri, in Proceedings of the 17th ACM ASIA Conference on Computer and Communications Security (ACM ASIACCS 2022), May 30th - June 3rd, 2022, Nagasaki, Japan.

19. "Privacy Attitudes and COVID Symptom Tracking Apps: Understanding Active Boundary Management by Users", Jinkyung Park, Eiman Ahmed, Hafiz Asif, **Jaideep Vaidya**, Vivek Singh, in Proceedings of the iConference, February 28 - March 4, 2022.

20. "A Service-oriented Framework for Developing Personalized Patient Care Plans for COVID-19", Abeer Elahraf, Ayesha Afzal, Ahmed Akhtar, Basit Shafiq, **Jaideep Vaidya**, in Proceedings of the 22nd Annual International Conference on Digital Government Research (dg.o 2021), June 9-11, 2021, virtual (due to COVID-19).

21. "Poster: Attribute-Based Access Control for NoSQL Databases", Eeshan Gupta, Shamik Sural, **Jaideep Vaidya**, and Vijayalakshmi Atluri, in Proceedings of the 11th ACM Conference on Data and Application Security and Privacy (CODASPY), April 26 - 28, 2021, virtual (due to COVID-19).

22. "Incremental Maintenance of ABAC Policies", Gunjan Batra, Vijayalakshmi Atluri, **Jaideep Vaidya**, and Shamik Sural, in Proceedings of the 11th ACM Conference on Data and Application Security and Privacy (CODASPY), April 26 - 28, 2021, virtual (due to COVID-19).

23. "Privacy-Preserving Friend Recommendation in an Integrated Social Environment", Nitish Uplavikar, **Jaideep Vaidya**, Dan Lin and Wei Jiang, in Proceedings of the 16th International Conference on Information Systems Security, December 16 - 20, 2020, Jammu, India. (Full Paper Acceptance rate = 11/52 = 21.15%)

24. "BP-Com: A Service Mapping Tool for Rapid Development of Business Processes", Ayesha Afzal, Muhammad Adeel Zahid, Ahmed Akhtar, Basit Shafiq, Shafay Shamail, Abeer Elahraf, **Jaideep Vaidya**, Nabil Adam, in Proceedings of the 40th IEEE International Conference on Distributed Computing Systems (ICDCS), July 8 - 10, 2020, Singapore. (Demo/Poster Acceptance rate = 13/43 = 30%))

25. "Blockchain Based Auditable Access Control for Distributed Business Processes", Ahmed Akhtar, Basit Shafiq, **Jaideep Vaidya**, Ayesha Afzal, Shafay Shamail, Omer Rana, in Proceedings of the 40th IEEE International Conference on Distributed Computing Systems (ICDCS), July 8 - 10, 2020, Singapore. (Full Paper Acceptance rate = 105/584 = 17.97%)

26. "Publishing Video Data with Indistinguishable Objects", Han Wang, Yuan Hong, Yu Kong, **Jaideep Vaidya**, in Proceedings of the 23rd International Conference on Extending Database Technology, 30th March-2nd April, 2020, Copenhagen, Denmark. (Full Paper Acceptance rate = 31/151 = 20.52%)

27. "Policy Reconciliation and Migration in Attribute Based Access Control", Gunjan Batra, Vijayalakshmi Atluri, **Jaideep Vaidya**, Shamik Sural, in Proceedings of the 15th International Conference on Information Systems Security (ICISS), December 16-20, 2019, Hyderabad, India. IDRBT Best Practice Paper. (Full Paper Acceptance rate = 17/63 = 26.98%)

28. "VisMAP: Visual Mining of Attribute-Based Access Control Policies", Saptarshi Das, Shamik Sural, **Jaideep Vaidya**, Vijayalakshmi Atluri, Gerhard Rigoll, in Proceedings of the 15th International Conference on Information Systems Security (ICISS), December 16-20, 2019, Hyderabad, India. (Full Paper Acceptance rate = 17/63 = 26.98%)

29. "How to accurately and privately identify anomalies", Hafiz Asif , Periklis Papakonstantinou, **Jaideep Vaidya**, in Proceedings of the 26th ACM Conference on Computer and Communications Security (CCS), November 11-15, 2019, London, United Kingdom. (Full Paper Acceptance rate = 149/934 = 15.95%)

30. "Social Media Communication of Public Sector Organizations: A Case Study of Northeast US", Ussama Yaqub, Soon Chun, Vijayalakshmi Atluri, **Jaideep Vaidya**, in Proceedings of the 20th Annual International Conference on Digital Government Research (dg.o 2019), June 18-20, 2019, Dubai, UAE.

31. "PolTree: A Data Structure for Making Efficient Access Decisions in ABAC", Ronit Nath, Saptarshi Das, Shamik Sural, **Jaideep Vaidya**, Vijay Atluri, in Proceedings of the 24th ACM Symposium on Access Control Models and Technologies (SACMAT '19), June 3-6, 2019, Toronto, Canada. (Full Paper Acceptance rate = 12/52 = 23.07%)

32. "Poster: ABACaaS: Attribute-Based Access Control as a Service", Augustee Meshram, Saptarshi Das, Shamik Sural, **Jaideep Vaidya**, Vijay Atluri, in Proceedings of the 9th ACM Conference on Data and Application Security and Privacy, poster track, March 25 - 27, 2019. Dallas, TX, USA.

33. "Privacy Preserving Probabilistic Record Linkage Without Trusted Third Party ", Ibrahim Lazrig, Toan Ong, Indrakshi Ray, Indrajit Ray, Xiaoqian Jiang, **Jaideep Vaidya**, in Proceedings of the 16th Annual Conference on Privacy, Security and Trust, August 28-30, 2018, Belfast, Northern Ireland, United Kingdom.

34. "Enabling the deployment of ABAC policies in RBAC systems", Gunjan Batra, Vijayalakshmi Atluri, **Jaideep Vaidya**, and Shamik Sural, in Proceedings of the 32nd Annual IFIP WG 11.3 Conference on Data and Applications Security and Privacy (DBSEC), July 16-18, 2018, Bergamo, Italy.

35. "Poster: Using Gini Impurity to Mine Attribute-based Access Control Policies with Environment Attributes", Saptarshi Das, Shamik Sural, **Jaideep Vaidya**, and Vijayalakshmi Atluri, in Proceedings of the 23rd ACM Symposium on Access Control Models and Technologies (SACMAT), poster track, June 13 - 15, 2018, Indianapolis, IN, USA.

36. "Analysis and Visualization of Subjectivity and Polarity of Twitter Location Data", Ussama Yaqub, Nitesh Sharma, Rachit Pabreja, Soon Ae Chun, Vijayalakshmi Atluri and **Jaideep Vaidya**, in Proceedings of the 19th Annual International Conference on Digital Government Research (dg.o 2018), 30 May - 1 June, 2018, Delft, the Netherlands.

37. "Poster: Web-based application for sentiment analysis of live tweets.", Nitesh Sharma, Rachit Pabreja, Ussama Yaqub, Vijayalakshmi Atluri, Soon Ae Chun, and **Jaideep Vaidya**, in Proceedings of the 19th Annual International Conference on Digital Government Research (dg.o 2018), 30 May - 1 June, 2018, Delft, the Netherlands.

38. "Emergency Response Plan Recommendation and Composition System (ERPRCS)", Ayesha Afzal, Basit Shafiq, Shafay Shamail, Abeer Elahraf, **Jaideep Vaidya**, and Nabil Adam, in Proceedings of the 19th Annual International Conference on Digital Government Research (dg.o 2018), 30 May - 1 June, 2018, Delft, the Netherlands.

39. "Poster - ASSEMBLE: A Collaborative Business Process Development Tool", Ayesha Afzal, A. Akhtar, N. Ishfaq, Basit Shafiq, Shafay Shamail, Abeer Elahraf, **Jaideep Vaidya**, and Nabil Adam, in Proceedings of the 40th International Conference on Software Engineering (ICSE) 2018, poster track, May 27 - June 3, 2018, Gothenburg, Sweden.

40. "Efficient bottom-up Mining of Attribute Based Access Control Policies", Tanay Talukdar, Gunjan Batra, **Jaideep Vaidya**, Vijayalakshmi Atluri, Shamik Sural, in Proceedings of the 3rd IEEE International Conference on Collaboration and Internet Computing, Oct 15 - 17, 2017, San Jose, California, USA.

41. "A Scalable Privacy-preserving Data Generation Methodology for Exploratory Analysis", **Jaideep Vaidya**, Basit Shafiq, Muazzam Asan, Nabil Adam, Xiaoqian Jiang, and Lucila Ohno-Machado, in Proceedings of the AMIA 2017 Annual Symposium, November 04 - 08, 2017, Washington DC, USA.

42. "Policy Adaptation in Attribute-Based Access Control for Inter-organizational Collaboration", Saptarshi Das, Shamik Sural, **Jaideep Vaidya**, Vijayalakshmi Atluri, in Proceedings of the 3rd IEEE International Conference on Collaboration and Internet Computing, Oct 15 - 17, 2017, San Jose, California, USA. Application Paper.

43. "Preventing Unauthorized Data Flows", Emre Uzun, Gennaro Parlato, Vijayalakshmi Atluri, Anna Lisa Ferrara, **Jaideep Vaidya**, Shamik Sural, David Lorenzi, in Proceedings of the 31st Annual IFIP WG 11.3 Conference, DBSec 2017, Philadelphia, PA, USA, July 19-21, 2017.

44. "Sentiment based Analysis of Tweets during the US Presidential Elections", Ussama Yaqub, Soon Ae Chun, Vijay Atluri and **Jaideep Vaidya**, in Proceedings of the 18th Annual International Conference on Digital Government Research (dg.o 2017), June 7-9, 2017, Staten Island, NY, USA.

45. "EmojiTCHA: Using Emotion Recognition to Tell Computers and Humans Apart", David Lorenzi, **Jaideep Vaidya**, Achyuta Aich, Shamik Sural, Vijayalakshmi Atluri, Joseph Calca, in Proceedings of the 32nd International Conference on ICT Systems Security and Privacy Protection (IFIP SEC 2017), May 29-31, 2017, Rome, Italy. (Full Paper Acceptance rate = 38/196 = 19.38%)

46. "Evaluating the Privacy Implications of Frequent Itemset Disclosure" Edoardo Serra, **Jaideep Vaidya**, Haritha Akella, and Ashish Sharma, in Proceedings of the 32nd International Conference on ICT Systems Security and Privacy Protection (IFIP SEC 2017), May 29-31, 2017, Rome, Italy. (Full Paper Acceptance rate = 38/196 = 19.38%)

47. "Secure and Efficient k-NN Queries", Hafiz Asif, **Jaideep Vaidya**, Basit Shafiq, Nabil Adam, in Proceedings of the 32nd International Conference on ICT Systems Security and Privacy Protection (IFIP SEC 2017), May 29-31, 2017, Rome, Italy. (Full Paper Acceptance rate = 38/196 = 19.38%)

48. "Friends are Forever? Evolution of Active Friendship Clusters in Online Social Networks", Haritabh Gupta, Shamik Sural, Niloy Ganguly, **Jaideep Vaidya**, in Proceedings of the Social Networking Workshop held in conjunction with the 9th International Conference on COMmunication Systems & NETworkS (COMSNETS), January 8, Bengaluru, India.

49. "An Administrative Model for Collaborative Management of ABAC Systems and its Security Analysis" (Invited paper), Sadhana Jha, Shamik Sural, Vijayalakshmi Atluri, and **Jaideep Vaidya**, in Proceedings of the 2nd IEEE International Conference on Collaboration and Internet Computing, Nov 1-3, 2016, Pittsburgh, PA, USA.

50. "Collaborative Differentially Private Outlier detection for Categorical Data", Hafiz Asif, Tanay Talukdar, **Jaideep Vaidya**, Basit Shafiq, and Nabil Adam, in Proceedings of the 2nd IEEE International Conference on Collaboration and Internet Computing, Nov 1-3, 2016, Pittsburgh, PA, USA.

51. "Towards a shared scientific data infrastructure: a secure multiparty computation based perspective" (extended abstract), **Jaideep Vaidya** and John Marcotte, SciDataCon, 11-13 September, 2016, Denver, CO, USA.

52. "Efficient Evaluation of Authorizations for Video Data", Ussama Yakub, Vijayalakshmi Atluri, **Jaideep Vaidya**, in Proceedings of the 9th International Conference on Security of Information and Networks, Newark, NJ, USA, July 20-22, 2016. (Full Paper Acceptance rate = 12/46 = 26.08%)

53. "PrefRank: quantification and aggregation of subjective user preferences", Anirban Basu, Shinsaku Kiyomoto, **Jaideep Vaidya**, Stephen Marsh, in Proceedings of the 15th IEEE International Conference on Trust, Security and Privacy in Computing and Communications (IEEE TrustCom-16), August 23-26, 2016, Tianjin, China.

54. "Deciphering Text from Touchscreen Key Taps", Haritabh Gupta, Shamik Sural, Vijayalakshmi Atluri and **Jaideep Vaidya**, in Proceedings of the 30th IFIP WG 11.3 Conference on Data and Applications Security and Privacy (DBSEC), July 18-21, 2016, Trento, Italy.

55. "Role Mining in the Presence of Separation of Duty Constraints", Prasuna Sarana, Arindam Roy, Shamik Sural, **Jaideep Vaidya**, Vijayalakshmi Atluri, in Proceedings of the 11th International

Conference on Information Systems Security (ICISS 2015), December 16-20, 2015, Kolkata, India. (Full Paper Acceptance rate = 24/112 = 18.69%)

56. "Enforcing Separation of Duty in Attribute based Access Control Systems", Sadhana Jha, Shamik Sural, Vijayalakshmi Atluri, **Jaideep Vaidya**, in Proceedings of the 11th International Conference on Information Systems Security (ICISS 2015), December 16-20, 2015, Kolkata, India. (Full Paper Acceptance rate = 24/112 = 18.69%)

57. "Managing Multi-dimensional Multi-granular Security Policies using Data Warehousing", Mahendra Pratap Singh, Shamik Sural, Vijayalakshmi Atluri, **Jaideep Vaidya**, Ussama Yakub, in Proceedings of the 9th International Conference on Network and System Security, November 3-5, 2015, New York City, USA. (Full Paper Acceptance rate = 23/112 = 20.53%)

58. "A framework for policy similarity evaluation and migration based on change detection", **Jaideep Vaidya**, Basit Shafiq, Vijayalakshmi Atluri, David Lorenzi, in Proceedings of the 9th International Conference on Network and System Security, November 3-5, 2015, New York City, USA. (Full Paper Acceptance rate = 23/112 = 20.53%)

59. "Preserving Privacy in Collaborative Business Process Composition", Hassaan Irshad, Basit Shafiq, **Jaideep Vaidya**, Muhammad Ahmed Bashir, Shafay Shamail and Nabil Adam, in Proceedings of the 12th International Conference on Security and Cryptography (SECRYPT), July 20-22, 2015, Colmar, Alsace, France. Best Paper Award. (Full Paper Acceptance rate = 13/150 = 8.6%)

60. "Migrating from DAC to RBAC", Emre Uzun, David Lorenzi, Vijayalakshmi Atluri, **Jaideep Vaidya**, Shamik Sural, in Proceedings of the 29th Annual IFIP WG 11.3 Working Conference on Data and Applications Security and Privacy (DBSEC), July 13-15, 2015, Fairfax, VA, USA.

61. "Enhancing the Security of Image CAPTCHAs through Noise Addition", David Lorenzi, Emre Uzun, **Jaideep Vaidya**, Shamik Sural, Vijayalakshmi Atluri, in Proceedings of the IFIP International Information Security and Privacy Conference (IFIP SEC), May 26-28, 2015, Hamburg, Germany.

62. "Lightweight practical private one-way anonymous messaging", Anirban Basu, Juan Camilo Corena, **Jaideep Vaidya**, Jon Crowcroft, Shinsaku Kiyomoto, Stephen Marsh, Yung Shin Van Der Sype, Toru Nakamura, in Proceedings of the 9th IFIP WG 11.11 International Conference on Trust Management, May 26-29, 2015, Hamburg, Germany.

63. "Practical Private One-way Anonymous Message Routing", Anirban Basu, Juan Camilo Corena, **Jaideep Vaidya**, Jon Crowcroft, Shinsaku Kiyomoto, Yung Shin Van Der Sype, Yutaka Miyake, Poster paper in Proceedings of the 10th ACM Symposium on Information, Computer and Communications Security (ASIACCS 2015), April 14-17, 2015, Singapore.

64. "Efficient Integrity Verification for Outsourced Collaborative Filtering", **Jaideep Vaidya**, Ibrahim Yakut, Anirban Basu, in Proceedings of the IEEE International Conference on Data Mining (ICDM), December 14 - 17, 2014, Shenzhen, China. (Regular Paper Acceptance rate = 71/727 = 9.7%)

65. "CF-inspired privacy-preserving prediction of next location in the cloud", Anirban Basu, Juan Camilo Corena, Anna Monreale, Dino Pedreschi, Fosca Giannotti, Shinsaku Kiyomoto, **Jaideep Vaidya**, and Yutaka Miyake, Poster Paper, in Proceedings of the 6th IEEE International Conference on Cloud Computing Technology and Science, December 15 - 18, 2014, Singapore.

66. "Temporal RBAC Security Analysis using Logic Programming in the Presence of Administrative Policies", Sadhana Jha, Shamik Sural, **Jaideep Vaidya**, and Vijayalakshmi Atluri, in Proceedings of the 10th International Conference on Information Systems Security (ICISS 2014), December 16 - 20, 2014, Hyderabad, India. (Regular Paper Acceptance rate = 20/129 = 15.50%)

67. "Teaching Privacy in an Interactive Fashion", **Jaideep Vaidya**, David Lorenzi, Basit Shafiq, Soon Chun, in Proceedings of the 2014 Information Security Curriculum Development Conference, October 11, 2014, Kennesaw, GA, USA.

68. "More Data, More Security Challenges: Integrating Analytics in to the Information Security Curriculum", Nazia Badar, **Jaideep Vaidya**, in Proceedings of the 2014 Information Security Curriculum Development Conference, October 11, 2014, Kennesaw, GA, USA.

69. "Utilizing social media to improve local government responsiveness", David Lorenzi, **Jaideep Vaidya**, Basit Shafiq, Soon Chun, Neelima Vegesna, Zamil Alzamil, Nabil Adam, Seth Wainer, and Vijayalakshmi Atluri, in Proceedings of the 15th Annual International Conference on Digital Government Research (dg.o '14), pp. 236-244, June 18-21, 2014, Aguascalientes City, Mexico.

70. "PrefRank: fair aggregation of subjective user preferences", Anirban Basu, Juan Camilo Corena, Shinsaku Kiyomoto, **Jaideep Vaidya**, Stephen Marsh, and Yutaka Miyake, Poster Paper, in Proceedings of the 29th Symposium On Applied Computing, Recommender Systems: Theory and Applications Track, March 24 - 28, 2014, Gyeongju, Korea.

71. "Privacy preserving trusted social feedback", Anirban Basu, Juan Camilo Corena, Shinsaku Kiyomoto, Stephen Marsh, **Jaideep Vaidya**, Guibing Guo, Jie Zhang and Yutaka Miyake, in Proceedings of the 29th Symposium On Applied Computing, Trust, Reputation, Evidence and other Collaboration Know-How Track, March 24 - 28, 2014, Gyeongju, Korea.

72. "Web Services Based Attacks against Image CAPTCHAs", David Lorenzi, **Jaideep Vaidya**, Shamik Sural and Vijay Atluri, in Proceedings of the 9th International Conference on Information Systems Security (ICISS 2013), 16-20 December 2013, ISI Kolkata, India. (Regular Paper Acceptance rate = 20/82 = 24.39%)

73. "An Administrative Model for Spatio-Temporal Role based Access Control", Manisha Sharma, Shamik Sural, Vijay Atluri and **Jaideep Vaidya**, in Proceedings of the 9th International Conference on Information Systems Security (ICISS 2013), 16-20 December 2013, ISI Kolkata, India. (Regular Paper Acceptance rate = 20/82 = 24.39%)

74. "Differentially Private Naive Bayes Classification", **Jaideep Vaidya**, Basit Shafiq, Anirban Basu, and Yuan Hong, in Proceedings of the 2013 IEEE/WIC/ACM International Conference on Web Intelligence (WI 2013), 17-20 November 2013, Atlanta, GA, USA.

75. "Incorporating Privacy into the Undergraduate Curriculum", **Jaideep Vaidya**, Basit Shafiq, David Lorenzi, and Nazia Badar, in Proceedings of the 2013 Information Security Curriculum Development Conference, October 11-12, 2013, Kennesaw, GA, USA.

76. "Toward Mining of Temporal Roles", Barsha Mitra, Shamik Sural, Vijayalakshmi Atluri, and **Jaideep Vaidya**, in Proceedings of the 27th Annual IFIP WG 11.3 Conference on Data and Applications Security and Privacy, July 15-17, 2013, Newark, NJ, USA.

77. "Analysis of TRBAC with Dynamic Temporal Role Hierarchies", Emre Uzun, Vijayalakshmi Atluri, **Jaideep Vaidya**, and Shamik Sural, in Proceedings of the 27th Annual IFIP WG 11.3 Conference on Data and Applications Security and Privacy, July 15-17, 2013, Newark, NJ, USA.

78. "Privacy-preserving collaborative filtering on the cloud – practical implementation experiences", Anirban Basu, **Jaideep Vaidya**, Hiroaki Kikuchi, and Theo Dimitrakos, in Proceedings of the 6th IEEE International Conference on Cloud Computing (CLOUD 2013), Applications and Experiences track, June 27 - July 2, 2013, Santa Clara, CA, USA.

79. "Community Based Emergency Response", David Lorenzi, **Jaideep Vaidya**, Soon Chun, Basit Shafiq, Varuna Naik, Vijayalakshmi Atluri, and Nabil Adam, in Proceedings of the 14th Annual International Conference on Digital Government Research (dg.o '13), Laval University, Quebec City, Quebec, Canada.

80. "Identifying Inference Attacks Against Healthcare Data Repositories", **Jaideep Vaidya**, Basit Shafiq, Xiaoqian Jiang,and Lucila Ohno-Machado, in Proceedings of the AMIA Clinical Research Informatics Summit, March 20-22, 2013, San Francisco, CA, USA.

81. "Attacking Image based CAPTCHAs using Image Recognition Techniques", David Lorenzi, **Jaideep Vaidya**, Emre Uzun, Shamik Sural and Vijay Atluri, in Proceedings of the 8th International Conference on Information Systems Security (ICISS '12), Guwahati, India, December 15-19, 2012. (Regular Paper Acceptance rate = 18/72 = 25.00%)

82. "Secure Composition of Cascaded Web Services", Basit Shafiq, Soon Ae Chun, **Jaideep Vaidya**, Nazia Badar and Nabil Adam, in Proceedings of the 8th IEEE International Conference on Collaborative Computing: Networking, Applications and Worksharing (CollaborateCom '12), Pittsburgh, Pennsylvania, United States, October 14-17, 2012.

83. "Risk based Access Control using Classification", Nazia Badar, **Jaideep Vaidya**, Vijayalakshmi Atluri, and Basit Shafiq, in Proceedings of the 5th Symposium on Configuration Analytics and Automation (SafeConfig 2012), Baltimore, Maryland, United States, October 3-4, 2012.

84. "Anonymizing set-valued data by nonreciprocal recoding", Mingqiang Xue, Panagiotis Karras, Chedy Raïssi, **Jaideep Vaidya**, Kian-Lee Tan, in Proceedings of the 18th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (KDD '12), Beijing, China, August 12-16, 2012. (Paper Acceptance rate = 133/755 = 18.11%)

85. "Privacy-Preserving Subgraph Discovery", Danish Mehmood, Basit Shafiq, **Jaideep Vaidya**, Yuan Hong, Nabil Adam, and Vijayalakshmi Atluri, in Proceedings of the 26th Annual WG 11.3 Conference on Data and Applications Security and Privacy (DBSec'12), July 11-13, 2012, Institut Mines-Telecom, Paris, France.

86. "Using QR Codes for Enhancing the Scope of Digital Government Services", David Lorenzi, **Jaideep Vaidya**, Soon Chun, Basit Shafiq, Ghulam Nabi, and Vijayalakshmi Atluri, in Proceedings of the 13th Annual International Conference on Digital Government Research (dg.o '12), University of Maryland, College Park, MD, USA.

87. "Analyzing Temporal Role Based Access Control Models", Emre Uzun, Vijayalakshmi Atluri, Shamik Sural, **Jaideep Vaidya**, Madhusudan Parthasarathy, Gennaro Parlato, and Anna Lisa Ferrera, in Proceedings of the 17th ACM Symposium on Access Control Models and Technologies (SACMAT '12), June 20-22, 2012, Newark, NJ, USA. (Regular Paper Acceptance rate = 19/73 = 26.02%)

88. "A framework for Verification and Optimal Reconfiguration of Event-driven Role Based Access Control Policies", Basit Shafiq, **Jaideep Vaidya**, Arif Ghafoor, and Elisa Bertino, in Proceedings of the 17th ACM Symposium on Access Control Models and Technologies (SACMAT '12), June 20-22, 2012, Newark, NJ, USA. (Regular Paper Acceptance rate = 19/73 = 26.02%)

89. "Role Mining under Role-Usage Cardinality Constraint", John C. John, Shamik Sural, Vijayalakshmi Atluri, and **Jaideep Vaidya**, in Proceedings of the IFIP International Information Security and Privacy Conference (SEC 2012), June 4-6, 2012, Heraklion, Crete, Greece. (Regular Paper Acceptance rate = 42/167 = 25.15%)

90. "Perturbation based privacy preserving Slope One predictors for collaborative filtering", Anirban Basu, **Jaideep Vaidya**, Hiroaki Kikuchi, and Theo Dimitrakos, in Proceedings of the 6th IFIP WG 11.11 International Conference on Trust Management, May 21-25, 2012, Surat, India. (Regular Paper Acceptance rate = 10/35 = 30%)

91. "Differentially Private Search Log Sanitization with Optimal Output Utility", Yuan Hong, **Jaideep Vaidya**, Haibing Lu, and Mingrui Wu, in Proceedings of the 15th International Conference on Extending Database Technology (EDBT), March 26-30, 2012, Berlin, Germany. (Regular Paper Acceptance rate = 43/193 = 22.5%)

92. "Feasibility of a privacy preserving collaborative filtering scheme on the Google App Engine – a performance case study", Anirban Basu, **Jaideep Vaidya**, Theo Dimitrakos, and Hiroaki Kikuchi, in Proceedings of the 27th ACM Symposium on Applied Computing (SAC), Cloud Computing Track, Mar 26 - 30, 2012, Trento, Italy. (Regular Paper Acceptance rate = 11/43 = 25.58%)

93. "Role Engineering: From Theory to Practice", Nino Verde, **Jaideep Vaidya**, Vijayalakshmi Atluri, Alessandro Colantonio, in Proceedings of the Second ACM Conference on Data and Application Security and Privacy (CODASPY '12), Feb 7-9, 2012, San Antonio, TX, USA. (Regular Paper Acceptance rate = 21/113 = 18.5%)

94. "Privacy-preserving collaborative filtering for the cloud", Anirban Basu, **Jaideep Vaidya**, Hiroaki Kikuchi, and Theo Dimitrakos, in Proceedings of the Third IEEE International Conference on Cloud Computing Technology and Science (CloudCom '11), Nov 29 - Dec 1, 2011, Athens, Greece. (Regular Paper Acceptance rate = 50/200 = 25%)

95. "Privacy-preserving Tabu Search for Distributed Graph Coloring", Yuan Hong, **Jaideep Vaidya**, Haibing Lu, and Basit Shafiq, in Proceedings of the Third IEEE International Conference on Information Privacy, Security, Risk and Trust (PASSAT '11), October 9-11, 2011, MIT, Boston, USA.

96. "Search Engine Query Clustering using Top-k Search Results", Yuan Hong, **Jaideep Vaidya**, and Haibing Lu, in Proceedings of the Tenth IEEE/WIC/ACM International Conference on Web Intelligence (WI '11), August 22-27, 2011, Campus Scientifique de la Doua, Lyon, France. (Regular Paper Acceptance rate = 41/200 = 20.5%)

97. "An Optimization Model for the Extended Role Mining Problem", Emre Uzun, Vijayalakshmi Atluri, Haibing Lu, and **Jaideep Vaidya**, in Proceedings of the 25th Annual IFIP WG 11.3 Working Conference on Data and Applications Security and Privacy (DBSEC '11), July 11-13, 2011, Richmond, VA, USA.

98. "Efficient Distributed Linear Programming with Limited Disclosure", Yuan Hong, **Jaideep Vaidya**, and Haibing Lu, in Proceedings of the 25th Annual IFIP WG 11.3 Working Conference on Data and Applications Security and Privacy (DBSEC '11), July 11-13, 2011, Richmond, VA, USA.

99. "Privacy Preserving weighted Slope One predictor for Item-based Collaborative Filtering", Anirban Basu, Hiroaki Kikuchi, and **Jaideep Vaidya**, Proceedings of the International Workshop on Trust and Privacy in Distributed Information Processing (workshop at the IFIPTM 2011), Copenhagen, Denmark, 2011.

100. "UICDS-based Information Sharing among Emergency Response Application Systems", Vijayalakshmi Atluri, Basit Shafiq, Soon Ae Chun, Ghulam Nabi and **Jaideep Vaidya**, in Proceedings of the 12th Annual International Conference on Digital Government Research (dg.o 2011), June 12-15 2011, University of Maryland, College Park, MD, USA. (Demo Paper - Best Demo or Poster Award)

101. "Weighted Rank-One Binary Matrix Factorization", Haibing Lu, **Jaideep Vaidya**, Vijayalakshmi Atluri, Heechang Shin, and Lili Jiang, in Proceedings of the Eleventh SIAM International Conference on Data Mining (SDM '11), April 28-30, 2011, Phoenix, Arizona, USA. (Regular Paper Acceptance rate = 86/343 = 25.07%)

102. "Identifying a Critical Threat to Privacy through Automatic Image Classification", David Lorenzi, and **Jaideep Vaidya**, in Proceedings of the First ACM Conference on Data and Application Security and Privacy (CODASPY 2011), Feb 21-23, 2011, San Antonio, TX, USA.

103. "Information Sharing Infrastructure for Pharmaceutical Supply Chain Management in Emergency Response", Vijayalakshmi Atluri, Basit Shafiq, **Jaideep Vaidya**, Soon Chun, Michael Trocchia, Nabil Adam, Christopher Doyle and Lawrence Skelly, in Proceedings of the 2010 IEEE International Conference on Technologies for Homeland Security, 8-10 November 2010, Westin Hotel, Waltham, MA.

104. "Reachability Analysis in Privacy-Preserving Perturbed Graphs", Xiaoyun He, **Jaideep Vaidya**, Basit Shafiq, Nabil Adam, and Xiaodong Lin, in Proceedings of the 2010 IEEE/WIC/ACM International Conference on Web Intelligence, August 31 - September 3, 2010, York University, Toronto, Canada.

105. "Role Mining in the Presence of Noise", **Jaideep Vaidya**, Vijayalakshmi Atluri, Qi Guo, and Haibing Lu, in Proceedings of the 24th Annual IFIP WG 11.3 Working Conference on Data and Applications Security (DBSEC '10), June 21-23, 2010, Rome, Italy. (Regular Paper Acceptance rate = 18/61 = 29.5%)

106. "Privacy-preserving Trust Verification", **Jaideep Vaidya**, Vijayalakshmi Atluri, Basit Shafiq, and Nabil Adam, in Proceedings of the 15th ACM Symposium on Access Control Models and Technologies (SACMAT '10), June 9-11, 2010, Pittsburgh, PA, USA. (Regular Paper Acceptance rate = 19/82 = 23.17%)

107. "Information Sharing among Incident Management Systems using UICDS", Basit Shafiq, **Jaideep Vaidya**, Vijayalakshmi Atluri, and Soon Chun, in Proceedings of the 11th Annual Conference on Digital Government Research (DGO '10), May 17-20, 2010, Puebla, Mexico.

108. "Extended Boolean Matrix Decomposition", Haibing Lu, **Jaideep Vaidya**, Vijayalakshmi Atluri, and Yuan Hong in Proceedings of the 2009 IEEE International Conference on Data Mining (ICDM '09), December 6-9, 2009, Miami, Florida, USA. (Regular Paper Acceptance rate = 70/786 = 8.9%)

109. "Integrated Resource and Logistics Management through Secure Information Sharing for Effective Emergency Response", Vijayalakshmi Atluri, Soon Chun, John Ellenberger, Basit Shafiq, and **Jaideep Vaidya**, Workshop on Emergency Management: Incident, Resource, and Supply Chain Management (EMWS09), November 5-6, 2009, Irvine CA.

110. "Effective Anonymization of Query Logs", Yuan Hong, Xiaoyun He, **Jaideep Vaidya**, Nabil Adam, and Vijayalakshmi Atluri, in Proceedings of the 18th ACM Conference on Information and Knowledge Management (CIKM '09), November 2-6, 2009, Hong Kong, China.

111. "Preserving Privacy in Social Networks: A Structure-Aware Approach", Xiaoyun He, **Jaideep Vaidya**, Basit Shafiq, Nabil Adam, and Vijayalakshmi Atluri, in Proceedings of the 2009 IEEE/WIC/ACM International Conference on Web Intelligence (WI-09), September 15-18, 2009, Milan, Italy. (Acceptance rate = 54/343 = 15.74%)

112. "Efficient Privacy-Preserving Link Discovery", Xiaoyun He, **Jaideep Vaidya**, Basit Shafiq, Nabil Adam, Evimaria Terzi, and Tyrone Grandison, in Proceedings of the 13th Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD-09), April 27-30, 2009, Bangkok, Thailand. (Acceptance rate = 39/338 = 11.54%)

113. "An Efficient Approximate Protocol for Privacy-Preserving Association Rule Mining", Murat Kantarcioglu, Robert Nix, and **Jaideep Vaidya**, in Proceedings of the 13th Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD-09), April 27-30, 2009, Bangkok, Thailand. (Short paper acceptance rate = 72/338 = 21.3%)

114. "A Secure Revised Simplex Algorithm for Privacy-Preserving Linear Programming", **Jaideep Vaidya**, in Proceedings of the 23rd IEEE International Conference on Advanced Information Networking and Applications (AINA-09), Security, Privacy and Trust Track, May 26-29, 2009, Bradford, UK.

115. "An Efficient Online Auditing Approach to Limit Private Data Disclosure", Haibing Lu, Yingjiu Li, Vijayalakshmi Atluri, **Jaideep Vaidya**, in Proceedings of the 12th International Conference on Extending Database Technology, March 23-26, 2009, St. Petersburg, Russia. (Acceptance rate = 92/408 = 22.5%)

116. "Privacy-Preserving Linear Programming", **Jaideep Vaidya**, in Proceedings of the 24th Annual ACM Symposium on Applied Computing, Security Track, March 8-12, 2009, Honolulu, Hawaii, USA. (Acceptance rate = 10/60 = 16.66%)

117. "The Role Hierarchy Mining Problem: Discovery of Optimal Role Hierarchies", Qi Guo, **Jaideep Vaidya**, and Vijayalakshmi Atluri, in Proceedings of the 24th Annual Computer Security Applications Conference, December 8-12, 2008, Anaheim, California. (Acceptance rate = 42/173 = 24.27%)

118. "Towards a holistic approach to privacy-preserving data analysis", **Jaideep Vaidya**, in Proceedings of the 2008 Workshop on Secure Knowledge Management, November 3-4, 2008, Richardson, TX, USA.

119. "Ontology Driven Resource Management for Emergency Response", Basit Shafiq, Nabil Adam, Vijay Atluri, **Jaideep Vaidya**, and Soon Ae Chun, in Proceedings of the 2008 Workshop on Secure Knowledge Management, November 3-4, 2008, Richardson, TX, USA.

120. "Secure Construction of Contingency Tables from Distributed Data", Haibing Lu, Xiaoyun He, **Jaideep Vaidya**, and Nabil Adam, in Proceedings of the 22nd Annual IFIP WG 11.3 Working Conference on Data and Applications Security (DBSEC '08), pp. 144 - 157, July 13-16, 2008, London, UK.

121. "Migrating to Optimal RBAC with Minimal Perturbation", **Jaideep Vaidya**, Vijayalakshmi Atluri, Qi Guo, and Nabil Adam, in Proceedings of the 13th ACM Symposium on Access Control Models and Technologies (SACMAT), June 11-13, 2008, Estes Park, Colorado, USA. (Acceptance rate = 20/79 = 25.31%)

122. "Secure Information Sharing and Analysis for Effective Emergency Management", Nabil Adam, Vijayalakshmi Atluri, Soon Ae Chun, John Ellenberger, Basit Shafiq, **Jaideep Vaidya**, and Hui Xiong, in Proceedings of the 9th Annual International Conference on Digital Government Research, May 18-21, 2008, Montreal, Canada.

123. "A Profile Anonymization Model for Privacy in a Personalized Location Based Service Environment", Heechang Shin, Vijayalakshmi Atluri, and **Jaideep Vaidya**, in Proceedings of the 9th International Conference on Mobile Data Management, April 27-30, 2008, Beijing, China. (Acceptance rate = 26/119 = 21.84%)

124. "Privacy-preserving Link Discovery", Xiaoyun He, Basit Shafiq, **Jaideep Vaidya**, and Nabil Adam, in Proceedings of the 23rd Annual ACM Symposium on Applied Computing, Data Mining Track, March 16-20, 2008, Fortaleza, Ceara, Brazil. (Acceptance rate = 44/627 = 7.01%)

125. "Optimal Boolean Matrix Decomposition: Application to Role Engineering", Haibing Lu, **Jaideep Vaidya**, and Vijay Atluri, in Proceedings of the 24th International Conference on Data Engineering, April 7-12, 2008, Cancun, Mexico. (Acceptance rate = 75/615 = 12.19%)

126. "Privacy Preserving Integration of Health Care Data", Nabil Adam, Thomas White, Basit Shafiq, **Jaideep Vaidya**, and Xiaoyun He, American Medical Informatics Association 2007 Annual Symposium, November 10-14, 2007, Chicago, Illinois.

127. "Enabling better Medical Image Classification through Secure Collaboration", **Jaideep Vaidya**, and Bhakti Tulpule, in Proceedings of the 14th IEEE International Conference on Image Processing, September 16-19, 2007, San Antonio, Texas.

128. "The Role Mining Problem: Finding a Minimal Descriptive Set of Roles", **Jaideep Vaidya**, Vijay Atluri, and Qi Guo, in Proceedings of the 12th ACM Symposium on Access Control Models and Technologies, June 20-June 22, 2007, Sophia Antipolis, France.

129. "Using Semantics for Automatic Enforcement of Access Control Policies among Dynamic Coalitions", Janice Warner, Vijay Atluri, Ravi Mukkamala and **Jaideep Vaidya**, in Proceedings of the 12th ACM Symposium on Access Control Models and Technologies, June 20-June 22, 2007, Sophia Antipolis, France.

130. "RoleMiner: Finding Roles using Subset Enumeration", **Jaideep Vaidya**, Vijay Atluri, and Janice Warner, in Proceedings of the 13th ACM Conference on Computer and Communications Security, October 30-November 3, Alexandria, VA, USA. (Acceptance rate = 38/256 = 14.84%)

131. "Privacy-Preserving SVM Classification on Vertically Partitioned Data", Hwanjo Yu, **Jaideep Vaidya**, and Xiaoqian Jiang, in Proceedings of the 10th Pacific-Asia conference on Knowledge Discovery and Data Mining, April 9-12, Singapore. (Acceptance rate = 100/501 = 19.96%)

132. "Privacy-Preserving SVM using Nonlinear Kernels on Horizontally Partitioned Data", Hwanjo Yu, Xiaoqian Jiang and **Jaideep Vaidya**, in the 21st Annual ACM Symposium on Applied Computing, Data Mining Track, April 23-27, 2006, Dijon, France.

133. "Privacy Preserving Decision Tree Classification for vertically partitioned data", **Jaideep Vaidya**, and Chris Clifton, in the proceedings of the Nineteenth Annual IFIP WG 11.3 Working Conference on Data and Applications Security, August 7-10, 2005, Storrs, CT.

134. "Collusion Set Detection through Outlier Discovery", Vandana Janeja, Vijay Atluri, **Jaideep Vaidya**, and Nabil R. Adam, IEEE International Conference on Intelligence and Security Informatics, May 19-20, 2005, Atlanta, GA.

135. "Knowledge Discovery from Transportation Network Data". Wei Jiang, **Jaideep Vaidya**, Zahir Balaporia, Chris Clifton, and Brett Banich, in proceedings of the Twenty First IEEE International Conference on Data Engineering, April 5-8, 2005, Tokyo, Japan. Best Industrial Paper award.

136. "Privacy Preserving Top-K Queries". **Jaideep Vaidya**, and Chris Clifton, in proceedings of the Twenty First IEEE International Conference on Data Engineering, April 5-8, 2005, Tokyo, Japan. (Acceptance rate = 100/521 = 19.19%)

137. "Privacy Preserving Outlier Detection". **Jaideep Vaidya**, and Chris Clifton, in proceedings of the Fourth IEEE International Conference on Data Mining, November 1-4, 2004, Brighton, UK. (Acceptance rate = 39/445 = 8.76%)

138. "Privacy Preserving Data Integration and Sharing". Chris Clifton, AnHai Doan, Ahmed Elmagarmid, Murat Kantarcioglu, Gunther Schadow, Dan Suciu, and **Jaideep Vaidya**, The 9th ACM SIGMOD Workshop on Research Issues in Data Mining and Knowledge Discovery (DMKD'2004) June 13, 2004, Paris, France.

139. "Privacy Preserving Naïve Bayes Classifier for Vertically Partitioned Data". **Jaideep Vaidya**, and Chris Clifton, in the Proceedings of the 2004 SIAM International Conference on Data Mining, April 22-24, 2004, Lake Buena Vista, Florida, USA.

140. "Privacy Preserving Naive Bayes Classifier for Horizontally Partitioned Data". Murat Kantarcioglu and **Jaideep Vaidya**, in the 2nd Workshop on Privacy Preserving Data Mining held in association with The Third IEEE International Conference on Data Mining, November 19 - 22, 2003, Melbourne, FL.

141. "Leveraging the "Multi" in Secure Multi-Party Computation". **Jaideep Vaidya**, and Chris Clifton, in the Workshop on Privacy in the Electronic Society held in association with The Tenth ACM Conference on Computer and Communications Security, October 27 - 31, 2003, Washington, D.C.

142. "Privacy-Preserving K-Means Clustering over Vertically Partitioned Data". **Jaideep Vaidya**, and Chris Clifton, The Ninth ACM SIGKDD International Conference on Knowledge Discovery and Data Mining, August 24 - 27, 2003, Washington, D.C. Honorable mention (runner up), best research paper.
(Revised paper invited for submission at Interface '04). (Acceptance rate = 46/298 = 15.43%)

143. "Privacy Preserving Association Rule Mining in Vertically Partitioned Data". **Jaideep Vaidya**, and Chris Clifton, The Eighth ACM SIGKDD International Conference on Knowledge Discovery and Data Mining, July 23 - 26, 2002, Edmonton, Alberta, Canada. (Acceptance rate = 88/308 = 28.57%)

144. "An architecture for Privacy-preserving Mining of Client Information". Murat Kantarcioglu and **Jaideep Vaidya**, in Volume 14 - Privacy, Security and Data Mining of the ACS Series Conferences in Research and Practice in Information Technology.

EDITOR REFEREED ARTICLES

1. "Using Secure-coprocessor for creating efficient Privacy-Preserving Distributed Data Mining Toolbox". Murat Kantarcioglu, Jaideep Vaidya and Chris Clifton, in International Workshop on Privacy and Security Issues in Data Mining held in conjuction with ECML/PKDD 2004, September 20, 2004, Italy. Invited paper.

2. "Defining Privacy for Data Mining". Chris Clifton, Murat Kantarcioglu and Jaideep Vaidya, in Proceedings of the National Science Foundation Workshop on Next Generation Data Mining, November 1-3, 2002, Baltimore, MD. Invited paper.

BOOK CHAPTERS

1. "Statistical Databases", Nabil Adam, Haibing Lu, Jaideep Vaidya, Basit Shafiq in *Encyclopedia of Cryptography and Security*, van Tilborg, Henk; Jajodia, Sushil (Eds.), Springer, 2011.

2. "Vertically Partitioned data", Jaideep Vaidya in *Encyclopedia of Database Systems*, Özsu, M. Tamer; Liu, Ling (Eds.), Springer, December 2009.

3. "Secure Multiparty Computation Methods", Murat Kantacioglu and Jaideep Vaidya in *Encyclopedia of Database Systems*, Özsu, M. Tamer; Liu, Ling (Eds.), Springer, December 2009.

4. "A Survey of Privacy-Preserving Methods across Vertically Partitioned Data", Jaideep Vaidya in *Privacy-Preserving Data Mining: Models and Algorithms*, Charu Aggarwal, Philip S. Yu, eds., Springer, 2008.

5. "Privacy, Profiling, Targeted Marketing, and Data Mining", Jaideep Vaidya and Vijay Atluri in *Digital Privacy: Theory, Technologies, and Practices*, A. Acquisti, S. Gritzalis, C. Lambrinoudakis, S. di Vimercati, eds., Taylor and Francis, December 18, 2007.

6. "Defining Privacy for Data Mining". Book Chapter. Chris Clifton, Murat Kantarcioglu and Jaideep Vaidya in *Data Mining: Next Generation Challenges and Future Directions*, AAAI/MIT Press, October 1, 2004.

7. "Privacy-Preserving Data Mining". Chris Clifton, Murat Kantarcioglu and and Jaideep Vaidya, invited chapter in *Foundations and Advances in Data Mining Computing*, T.Y. Lin and Wesley Chu, eds., Springer-Verlag, October 2005.

PROFESSIONAL ACTIVITIES

Administrative Service to IEEE
- Vice-President of Publications, Member of the Executive Committee and the Board of Governors, IEEE Computer Society, January 2024 - December 2024.
- Member, IEEE Publication Services and Products Board, January 2024 - December 2024.
- Transactions Operations Committee Chair and ex-officio member of the IEEE Computer Society Board of Governors, January 2023 - December 2023.

Editor-in-Chief
- IEEE Transactions on Dependable and Secure Computing, January 1, 2018 - December 31, 2022.

Program Chair/Co-Chair
1. 29th ACM Symposium on Access Control Models and Technologies (SACMAT '24)
2. 10th International Conference on Mathematics and Computing (ICMC), January 2-3, 2024, Tamil Nadu, India.
3. 10th International Workshop on Genome Privacy and Security (GenoPri '23), November 17, 2023, online.
4. 20th Annual International Conference on Privacy, Security & Trust, 21-23 August, 2023, Copenhagen, Denmark.
5. 21st IEEE International Conference on Trust, Privacy, and Security in Computing and Communications (IEEE Trustcom 2022), program vice-chair.
6. Blue Sky/Vision Track, IEEE International Conference on Collaboration and Internet Computing (CIC), 2021.
7. Blue Sky/Vision Track, ACM Symposium on Access Control Models and Technologies (SACMAT), 2021.

8. 34th Annual IFIP WG 11.3 Working Conference on Data and Applications Security (DBSEC '20), June 24-26, 2020, Regensburg, Germany.

9. 1st IEEE International Conference on Trust, Privacy and Security in Intelligent Systems, and Applications (TPS), December 12 - 14, 2019, Los Angeles, California, USA.

10. 11th International Symposium on Cyberspace Safety and Security, December 1-3, 2019, Guangzhou, China.

11. 18th International Conference on Algorithms and Architectures for Parallel Processing (ICA3PP), November 15-17,2018, Guangzhou, China.

12. 4th IEEE International Conference on Collaboration and Internet Computing (CIC '18), October 18-20, 2018, Philadelphia, PA, USA.

13. 13th International Conference on Information Systems Security (ICISS-2017), December 16-20, 2017, Mumbai, India.

14. 19th European Symposium on Research in Computer Security (ESORICS '14), September 7-11, 2014, Wroclaw, PL.

15. 18th ACM Symposium on Access Control Models and Technologies (SACMAT '13), June 12-14, 2013, Amsterdam, NL.

16. 10th Annual Workshop on Privacy in Electronic Society (WPES), October 17th, 2011, Chicago, IL, USA.

17. 23rd Annual IFIP WG 11.3 Working Conference on Data and Applications Security (DBSEC '09), July 12-15, 2009, Montreal, Canada.

18. 6th International Workshop on Privacy Aspects of Data Mining, held in conjunction with the 2007 IEEE International Conference on Data Mining, October 28, 2007, Omaha, NE, USA.

General Chair/Co-Chair

1. 6th IEEE International Conference on Blockchain (Blockchain 2023), December 15-18, 2023, Ocean Flower Island, Hainan, China.

2. 5th IEEE International Conference on Trust, Privacy and Security in Intelligent Systems, and Applications, November/December, 2023, Atlanta, GA, USA.

3. 36th Annual IFIP WG 11.3 Working Conference on Data and Applications Security (DBSEC '23), July 18-20, 2023, Newark, NJ, USA.

4. 2nd IEEE International Conference on Trust, Privacy and Security in Intelligent Systems, and Applications (TPS), December 12 - 14, 2020, Washington, D.C., USA.

5. 9th International Conference on Security of Information and Networks (SIN 2016), July 20-22, 2016, Newark, NJ, USA.

6. 27th Annual IFIP WG 11.3 Working Conference on Data and Applications Security (DBSEC '13), July 15-17, 2013, Newark, NJ, USA.

7. 17th ACM Symposium on Access Control Models and Technologies (SACMAT '12), June 20-22, 2012, Newark, NJ, USA.

Associate Editor (Editorial Board)

- IEEE Transactions on Dependable and Secure Computing (TDSC), 2011 - 2016.
- Journal of Computer Security (JCS), 2013 - present.
- Computers & Security (COSE), 2015 - 2018.
- International Journal of Security and Networks (IJSN), 2011 - present.
- Journal of Healthcare Informatics Research, 2018 - present.

IFIP WG 11.3 Working Group on Data and Applications Security and Privacy, Vice-chair, July 1, 2019 – present.

SIAM Data Mining & Analytics Activity Group, Vice-chair, Jan 1, 2016 – Dec. 31, 2017.

Member, ACM US Public Policy Council, Privacy, Security, Digital Governance Committees, March, 2017 – present

Member, IEEE P7002 – Data Privacy Process Standard

Organizing Committee, NSF PREPARE (Pandemic Research for Preparedness and Resilience) Workshop on DATA: Access, Creation, and Maintenance of Data and Computing Resources, May 12-13, 2021.

Member of Advisory Board, Technical Committee on Blockchain and Distributed Ledger Technologies (DLT), IEEE Technology and Engineering Management Society (TEMS), May 2021 - present

External Reviewer, Italian Research and University Evaluation Agency (ANVUR)

Foreign Faculty, JEC Jabalpur, under auspices of the GIAN Program, Ministry of Human Resource Development, Government of India, June 20, 2016 – July 1, 2016.

SIGKDD Doctoral Dissertation Awards Committee, 2009–2014.

Proceedings Chair
- The 21st ACM Conference on Computer and Communications Security (CCS '14), November 3-7, 2014, Arizona, USA.
- The 16th ACM Symposium on Access Control Models and Technologies (SACMAT '11), June 9-11, 2011, Innsbruck, Austria.
- The Eleventh ACM SIGKDD International Conference on Knowledge Discovery and Data Mining, August 21-24, 2005, Chicago, IL.

Publicity Chair
- 2008 Workshop on Secure Knowledge Management, November 3-4, 2008, Richardson, TX, USA.
- International Conference and Workshop on Cyber Security, Cyber Crime and Cyber Forensics, August 19-21, 2009, Cochin, India .

Panels Co-Chair
- The IEEE CIC/CogMI/TPS-ISA joint conferences, December 14-16, 2022, virtual.

Registrations Chair
- 14th ACM Symposium on Access Control Models and Technologies (SACMAT '09), June 3-5, 2009, Stresa, Italy.

Book Donations Chair
- ACM SIGMOD/PODS 2005 Conference, June 14-16, 2005, Baltimore, MD.

Special Issue Editor
- Journal of Computer Security, Selected papers from IFIP DBSEC '09 Conference (co-edited with Ehud Gudes).
- International Journal of Computational Models and Algorithms in Medicine, Special Issue on Privacy in Health Informatics (co-edited with Soon Chun).

Session Chair
- The IEEE CIC/CogMI/TPS Joint Conferences, December 14-16, 2022, virtual.
- The IEEE CIC/CogMI/TPS Joint Conferences, December 12-14, 2019, Los Angeles, CA, USA.
- The 4th IEEE International Conference on Collaboration and Internet Computing (CIC), October 18-20, 2018, Philadelphia, PA, USA.
- The Second ACM Conference on Data and Application Security and Privacy (CODASPY), February 8-10, 2012, San Antonio, TX, USA.
- 25th Annual IFIP WG 11.3 Working Conference on Data and Applications Security and Privacy (DBSEC '11), July 11-13, 2011, Richmond, VA, USA.
- The 15th ACM Symposium on Access Control Models and Technologies (SACMAT '10), June 9-11, 2010, Pittsburgh, PA, USA.
- 23rd Annual IFIP WG 11.3 Working Conference on Data and Applications Security (DBSEC '09), July 12-15, 2009, Montreal, Canada.
- 24th Annual ACM Symposium on Applied Computing, Security Track, March 8-12, 2009, Honolulu, Hawaii, USA.

Panel Participant
- Supply Chain Management in the Post-Pandemic and AI Age Conference, June 15, Piscataway, NJ, USA.
- The IEEE CIC Conferences, Plenary Panel on Artificial Intelligence and Privacy for Pandemics, December 1, 2020, virtual.
- The IEEE CIC/CogMI/TPS Joint Conferences, December 12-14, 2019, Los Angeles, CA, USA.
- The Twenty-Third ACM Symposium on Access Control Models and Technologies (SACMAT), June 13-15, 2018, Indianapolis, IN, USA.
- Challenge Workshop on Record Linkage Challenges in Distributed Data Networks, Concordium 2016, September 12-13, 2016, Washington, DC, USA.
- Moderator, The Fourth ACM Conference on Data and Application Security and Privacy (CODASPY), March 3-5, 2014, San Antonio, TX, USA.
- The Second ACM Conference on Data and Application Security and Privacy (CODASPY), February 8-10, 2012, San Antonio, TX, USA.
- The Twenty-First Conference on Computers, Freedom, and Privacy, June 14-16, 2011, Washington, DC.
- 2009 IEEE/WIC/ACM International Conference on Web Intelligence, September 15-18, Milan, Italy.

Program Committee
- The ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD) – '17, '16, '15, '14, '13, '12, '11, '10.
- The IEEE International Conference on Data Mining (ICDM) – '18, '16, '15, '13, '12, '10, '09, '08, '06.
- The ACM Symposium on Access Control Models and Technologies (SACMAT) – '21, '20, '19, '18, '17, '15, '14, '12, '11, '10, '09.
- The European Symposium on Research in Computer Security (ESORICS) – '19, '18, '17, '16, '15, '13, '12, '11.
- The Annual WG 11.3 Conference on Data and Applications Security and Privacy (DBSec) – '19, '18, '17, '16, '15, '14, '13, '12, '11, '10, '08.

- The Annual International Conference on Digital Government Research (dg.o) – '18, '17, '16, '15, '14, '13, '12, '11, '10, '09.
- The International Conference on Very Large Data Bases (VLDB) – '18, '16, '12 (Ph.D. Program Track)
- The ACM SIGMOD International Conference on Management of Data – '18, '14 (Demo Track), '13 (Demo Track).
- The ACM Conference on Data and Application Security and Privacy (CODASPY) – '19, '13, '12.
- The IEEE International Conference on Distributed Computing Systems (ICDCS) – '21, '20, '19.
- The International Conference on World Wide Web (WWW) Posters Track – '12, '11.
- The ACM International Conference on Information and Knowledge Management (CIKM) – '13.
- International Conference on Data Warehousing and Knowledge Discovery (DaWaK) – '08, '07, '06.
- The IEEE International Conference on Granular Computing (GRC) – '09, '08, '06.
- The International Conference on Applied Cryptography and Network Security (ACNS) – '12.
- The International Conference on Security and Cryptography (SECRYPT) – '18, '17, '16, '15, '14, '13.
- Workshop on Privacy in the Electronic Society (WPES), in conjunction with the ACM Conference on Computer and Communications Security (CCS) – '16, '12, '10, '09.
- International Workshop on Privacy Aspects of Data Mining (PADM) – '11, '06, '04.
- The IEEE International Conference on Privacy, Security, Risk and Trust (PASSAT) – '12, '11.
- The International Conference on Network and System Security (NSS) – '16, '15, '14, '13, '12, '11.
- The IEEE Conference on Communications and Network Security (CNS) – '20, '18, '17, '15.
- The International workshop on Trust and Privacy in Distributed Information Sharing 2011 (TP-DIS 2011) colocated with IFIPTM 2011, 28 June 2011, Copenhagen, Denmark.
- The 2nd International Symposium on Data, Privacy, and E-Commerce (ISDPE '10), September 13-14, 2010, Buffalo/Niagara Falls, NY, USA.
- The 5th International Conference on Information Technology (FutureTech 2010), Security and Trust Computing Track, May 21-23, 2010, Busan, Korea.
- The IEEE International Conference on Data Engineering (ICDE) – '16, '10.
- The Symposium on Configuration Analytics and Automation (SafeConfig) – '12, '11.
- The 2009 Information Security Conference (ISC '09), September 7-9, 2009, Pisa, Italy.
- The First Workshop on Management and mining of UNcertain Data (MOUNDS 2009), March 29, 2009, Shanghai, China.
- 2008 Workshop on Secure Knowledge Management, November 3-4, 2008, Richardson, TX, USA.
- The Second International Workshop on Privacy-Aware Location-based Mobile Services (PALMS), April 27, 2008, Beijing, China.
- The Eleventh IEEE International Conference on Computational Science and Engineering, July 16-18, 2008, Sao Paolo, Brazil.
- The First Workshop on Data Mining of Uncertain Data (DUNE 2007), October 28, 2007, Omaha, NE, USA.
- The First Ph.D. Workshop in CIKM (PIKM), November 5, 2007, Lisboa, Portugal.
- The Third International Conference on Information Systems Security (ICISS 2007), December 16-20, 2007, Delhi, India.

- The Third International Workshop on Data Mining and Knowledge Discovery (ADMKD 2007), October 2, 2007, Varna, Bulgaria.
- The Twenty-Second National Conference on Artificial Intelligence, July 22-26, 2007, Vancouver, British Columbia, Canada.
- Second International Conference on Information Systems Security, December 17-21, 2006, Kolkata, India.
- 2nd ADBIS Workshop on Data Mining and Knowledge Discovery, September 6, 2006, Thessaloniki, Greece.
- 2005 ACM Symposium on Applied Computing Special Track on Data Mining (DM), March 13-17, 2005, Santa Fe, New Mexico.

Proposal Review Panel
- National Institutes of Health (Mar '21, Nov '20, Oct '19, Jun '19, Nov' 17, Feb '16, Apr '14).
- National Science Foundation (Jan '22, Oct '20, Jan '20, Nov '18, Oct' 17, Apr '17, Nov '13, May '12, May '11, Apr '08).
- The Marsden Fund, New Zealand, July 2016
- Kentucky Science & Engineering Foundation, November 2006.
- NASA Intelligent Systems Project, January 2004.

Reviewer (only journals listed)
- ACM Transactions on Knowledge Discovery from Data.
- Knowledge and Information Systems, Springer-Verlag, London.
- Journal of Artificial Intelligence Research.
- IEEE Transactions of Knowledge and Data Engineering.
- IEEE Transactions on Systems, Man, and Cybernetics.
- IEEE Transactions on Dependable and Secure Computing.
- IEEE Transactions on Neural Networks.
- Journal of Database Management, Idea Group Inc.
- Journal of Official Statistics, Statistics Sweden.
- Journal of Computing and Information Technology, University Computing Centre, Croatia.
- Journal of Computer Security, IOS Press, The Netherlands.
- International Journal on Digital Libraries, Springer-Verlag.
- International Journal on Very Large Data Bases, Springer-Verlag.
- Data and Knowledge Engineering, Elsevier.
- Data Mining and Knowledge Discovery, Springer.
- International Journal of Information and Computer Security, Inderscience.

UNIVERSITY SERVICE

1. Member, Chancellor-Provost Committee to Investigate the Feasibility of a Rutgers School for Nontraditional Learners, 2022-2023.
2. Member, Provost's Strategic Taskforce on Cyberinfrastructure & Data Science, 2022-2023.
3. Member, OARC Faculty Advisory Committee, 2023 – present.
4. Member, Rutgers Research Data Stewards Committee, 2021 – present.
5. Member, Rutgers Advanced Research Cyberinfrastructure 2025 Committee.
6. Member, Rutgers COVID-19 Health Monitoring IT Working Group, 2020–2021.
7. Member, Surveillance Algorithm and Modeling Subgroup, 2020 – 2021.
8. Member, Rutgers AI and Pandemics Initiative, 2020 – present.
9. co-Coordinator, Analytics and Information Management Concentration, MBA program, 2020 – 2023.
10. MSIS Representative, RBS Business Forum, 2020 – present.
11. Ph.D. Coordinator for Information Technology, July, 2021 – present.
12. Chair, Technology Policy Committee, 2012-2013, 2017-2018
13. Member, Research Resources Committee, 2020 – 2022.
14. Member, Appointments and Promotions (A & P) Committee, 2018 – 2020.
15. Ph.D. Coordinator for Information Technology, 2016 – 2020.
16. Member, RU-N Research Advisory Committee (RAC), 2017 – present
17. Member, RU-N Research Office Staffing and Recruiting Committee, 2017 – 2021
18. Member, Teaching Methods Innovations Committee, 2005 – 2006
19. Member, Undergraduate - NB Curriculum Committee, 2005 – 2006
20. Member, Undergraduate - NWK Curriculum Committee, 2005 – 2006
21. Member, Graduate Admissions Committee, 2005 – present
22. Member, Policy Committee for the Master of Information Technology Program, 2006 – 2007
23. Member, Search Committee for Director of Information Technology, Rutgers Business School, 2008
24. Member, Search Committee for Senior Director of Office of Technology and Instructional Services (OTIS), Rutgers Business School, 2016
25. Member, Technology Policy Committee, 2010-2011, 2015-2017
26. Member, Masters in Information Technology Coordinating Committee, 2010-2011
27. Member, Newark Undergraduate Scholastic Standing Committee, 2010-2011
28. Member, MSIS Hiring Committee, 2011-2012, 2016-2017
29. Member, MSIS Department Executive Committee, 2011-2012
30. Member, RBS Undergraduate Program - Newark Admissions Committee, 2012-2013
31. Member, RBS Undergraduate Program - Newark Policy Committee, 2014-2018
32. Member, Newark Undergraduate Admissions Committee, 2013-2015
33. Member, Information Technology Task Force, 2013-2014
34. Member, RBS Service Awards Committee, 2014-2015
35. Member, Public Scholarship Task Force, 2014-2015
36. Member, Undergraduate Rankings Task Force, 2014-2015
37. Member, Ad-Hoc Administration Evaluation Advisory Committee, 2016-2017

1. Keynote: "Trustworthy Machine Learning", 1st International Conference on Artificial Intelligence Security and Privacy, December 4, 2023, Guangzhou, China.

2. Keynote: "Ensuring Privacy and Trust in Genomics Research", IDASH 2023 Genome Privacy and Security Workshop, October 28, 2023, New Haven, CT, USA.

3. Keynote: "Engineering Secure and Privacy-Preserving Systems", The 10th IEEE International Conference on Cyber Security and Cloud Computing (CSCloud 2023), July 2, 2023, Xiangtan, China.

4. Keynote: "Security in the Edge Computing Environments: Challenges and Opportunities", The 21st IEEE International Conference on Trust, Security and Privacy in Computing and Communications (TrustCom 2022), December 11, 2022, Wuhan, Hubei, China.

5. Keynote: "Privacy-preserving Data Sharing and Analytics: An HPC perspective", The First Workshop on Federated and Privacy Preserving AI for HPC, Nov 14, 2022 Dallas, TX, USA.

6. Keynote: "Privacy-preserving Data Sharing and Analytics", 3rd International Conference on Public Key Infrastructure and its Applications (PKIA 2022), Bangalore, Karnataka, India, September 10, 2022.

7. Keynote: "Privacy-preserving Analytics in the Big Data environment", 6th International Conference on Data Mining and Big Data (DMBD 2021), October 20, 2021, Guangzhou, China.

8. Keynote: "Ensuring Security and Privacy for Emerging Cloud and Edge Computing Environments", 18th International Conference on Security and Cryptography, July 6, 2021, Online Streaming (due to COVID).

9. Keynote: "Privacy-preserving Analytics in the Big Data environment", 14th International Conference on Network and System Security, Melbourne, Australia, November 26, 2020.

10. Keynote: "Privacy-preserving Analytics in the Big Data environment", The 5th Conference on Data Security and Privacy, Xi'an University of Posts and Telecommunications, Xi'an, China, November 8, 2020.

11. Keynote: "Quality of Service aware Security and Privacy for Cloud and Edge Computing Environments", IEEE/ACM International Symposium on Quality of Service, Hangzhou, China, June 16, 2020.

12. Keynote: "Privacy-preserving Analytics in the Big Data environment", The International Conference on Cyberspace Data and Intelligence (CyberDI 2019), Beijing, China, December 17, 2019.

13. Keynote: "Automating Security Configuration and Administration: A Machine Learning Perspective", The 2nd International Conference on Machine Learning for Cyber Security (ML4CS), Xi'an, China, September 20, 2019.

14. Keynote: "Ensuring privacy in social network analysis", 5th International Symposium on Security and Privacy in Social Networks and Big Data (SocialSec 2019), Copenhagen, Denmark, July 15 2019.

15. Keynote: "Security in the edge computing environment: Challenges and Opportunities", 12th International Conference on Network and System Security (NSS-2018), Hong Kong, China, August 27, 2018.

16. Keynote: "Security in the edge computing environment: Challenges and Opportunities", 32nd Annual IFIP WG 11.3 Conference on Data and Applications Security and Privacy, Bergamo, Italy, July 17, 2018.

17. Keynote: "Privacy Preserving Collaborative Optimization", The 7th International Conference on Security of Information and Networks (SIN 2014), Glasgow, UK, September 10, 2014.

18. Keynote: Automated Security Configuration and Administration – An Access Control Perspective, 5th International Workshop on Security (IWSEC' 2010), November 22-24, 2010, Kobe, Japan.

Seminars, Tutorials, and Other Presentations

1. "Preparing Leaders in Fintech: From Research to the Classroom", Rutgers: Leading the Next Generation of Fintech, Ruth Bader Ginsburg Hall, Newark, NJ, September 28, 2023.

2. "Artificial Intelligence Roundtable - A.I.'s Future in New Jersey", New Jersey Economic Development Authority, September 20, 2023.

3. "Trustworthy Machine Learning", Cisco Research Data Security Summit, June 27, 2023.

4. "Preserving Privacy in Healthcare Analytics", Yale University, Biomedical Informatics and Data Science Seminar, June 22, 2023.

5. "Privacy-preserving Data Sharing and Analytics", Carnegie Mellon University, Security and Privacy Institute (CyLab) Seminar, April 13, 2023.

6. "Engineering Secure and Privacy-Preserving Systems", Distinguished Cybersecurity Seminar, Department of Informatics and Networked Systems, University of Pittsburgh, April 12, 2023.

7. "Automating Security Configuration and Administration: A Machine Learning Perspective", 2021 Faculty Development Workshop on Data Science and Cybersecurity, Boise State University, August 9, 2021.

8. "How to identify anomalies accurately and privately", Rutgers University ECE Seminar, Piscataway, NJ, March 23, 2021.

9. "Privacy-Preserving Crowdsensing Of Covid-19", 2021 Chancellor's Digital Research Day, Rutgers University, February 17, 2021.

10. "Privacy-Preserving Crowdsensing Of Covid-19: Why, How, And Does It Work?", IQB Working Group: Communications and [Mis]Information, Rutgers University, November 9, 2020.

11. "How to identify anomalies accurately and privately", Dartmouth College, Hanover, NH, October 30, 2020.

12. "How to identify anomalies accurately and privately", Montclair State University, Montclair, NJ, October 28, 2020.

13. "How to identify anomalies accurately and privately", Peking University, Beijing, China, December 16, 2019.

14. "Engineering Secure and Privacy-preserving Systems for the Big Data Environment", Marathwada Mitra Mandal's College of Engineering, Pune, August 28, 2019.

15. "Engineering Secure and Privacy-preserving Systems", Washington University of St. Louis, St. Louis, MO, March 8, 2019.

16. "Engineering Secure and Privacy-preserving Systems", University of Connecticut, Storrs, CT, February 27, 2019.

17. "Privacy-preserving Analytics: the next frontier", Guangzhou University, Guangzhou, China, August 25, 2018.

18. "Analytics Driven Security Configuration and Management", U.S. Air Force Science and Technology 2030 Workshop, Indiana University, Bloomington, IN, USA, May 10, 2018.

19. "Inculcating the research mindset: Why, How, and When", SNDT Women's University, Pune, India, January 11, 2018.

20. "Ensuring Confidentiality and Integrity for Outsourced Collaborative Filtering", IBM T. J. Watson Research Center, Yorktown, NY, March 23, 2016.

21. "Enabling Security, Privacy, and Analytics in Big Data: A Biomedical Perspective", University of California at San Diego, San Diego, CA, March 11, 2016.

22. "Ensuring Confidentiality and Integrity for Outsourced Collaborative Filtering", Princeton University, Princeton, NJ, October 12, 2015.

23. "Inculcating the research mindset", SNDT Women's University, Pune, India, August 25, 2015.

24. "Ensuring Confidentiality and Integrity for Outsourced Collaborative Filtering", University at Albany, SUNY, Albany, NY, USA, March 30, 2015.

25. "Ensuring Confidentiality and Integrity for Outsourced Collaborative Filtering", New Jersey Institute of Technology, Newark, NJ, USA, November 19, 2014.

26. "Ensuring Confidentiality and Integrity for Outsourced Collaborative Filtering", IIT Kharagpur, Kharagpur, West Bengal, India, July 21, 2014.

27. "Automating Security Configuration and Administration - An access control perspective", Department of Computer Science and Automation, Indian Institute of Science, August 14, 2013.

28. "Automating Security Configuration and Administration - An access control perspective", EMC Center of Excellence, Bangalore, India, August 14, 2013.

29. "Privacy-preserving Analytics and Collaboration", Department of Economics, Fergusson College, Pune, India, August 12, 2013.

30. Tutorial: "Privacy in the context of digital government", Tutorial at the 13th Annual International Conference on Digital Government Research (dg.o 2012), June 4-7, 2012, University of Maryland, College Park, MD.

31. The Role Mining Problem – A formal perspective, University of Texas at Austin, February 9, 2012.

32. "Automating Security Configuration and Administration: An Access Control Perspective", Winter 2011 Security and Privacy Day, New Jersey Institute of Technology, December 2, 2011.

33. The Role Mining Problem – A formal perspective, University of Maryland, Baltimore County, June 15, 2011.

34. The Role Mining Problem – A formal perspective, Arizona State University, April 28, 2011.

35. Privacy-preserving Graph Analysis, Tokai University, Tokyo, Japan, November 26, 2010.

36. Tutorial: Role Engineering and Role Mining, 5th International Conference on Information Systems Security (ICISS 2009), 14-18 December 2009, Eastern Zone Cultural Center, Kolkata, India.

37. The Role Mining Problem – A Formal Perspective, University of Pittsburgh, Pittsburgh, PA, February 13, 2009.

38. Effective Query Log Anonymization, Google, Inc., Mountain View, CA, December 8, 2008.

39. The Role Mining Problem - A Formal Perspective, Syracuse University, Syracuse, NY, December 3, 2008.

40. The Role Mining Problem – A Formal Perspective, University of Texas at San Antonio, San Antonio, TX, November 5, 2008.

41. The Role Mining Problem – A Formal Perspective, Stevens Institute of Technology, Hoboken, NJ, October 20, 2008.

42. Role Engineering and the Role Mining Problem, University of Texas at Dallas, Dallas, TX, September 17, 2007.

43. Role Engineering and the Role Mining Problem, Tata Research Design & Development Center, August 1, 2007, Pune, India.

44. "RoleMiner: Role Mining via Subset Enumeration", at the 13th ACM Conference on Computer and Communications Security, November 1, 2006.

45. "Privacy-Preserving Data Mining", at the Tata Research Design & Development Center, Pune, India, June 21, 2005.

46. "Privacy-Preserving Outlier Detection", at the Stevens Institute of Technology, Hoboken, NJ, May 2, 2005.

47. "Privacy Preserving Collaboration – Supply Chain, Transportation Logistics and Other problems", Supply Chain Management Research Seminar Series, Rutgers Business School, April 28, 2005.

48. "Privacy Preserving K-Means Clustering on Vertically Partitioned Data", invited talk at Interface '04, the best of data mining at KDD session, Baltimore, Maryland, May 27, 2004.

49. "Privacy Preserving Data Mining over Vertically Partitioned Data" at the CSIS Seminar at the Department of Information and Software Engineering, George Mason University, May 25, 2004.

50. "Privacy Preserving Data Mining on Vertically Partitioned Data" at the CERIAS Security Seminar, Purdue University, January 14, 2004.

51. "Privacy Preserving Data Mining over Vertically Partitioned Data" at the DAIS Seminar at the CS Department at University of Illinois at Urbana-Champaign, October 24, 2003.

52. "Leveraging the "Multi" in Secure Multi-Party Computation" at the Workshop on Privacy in Electronic Society held in conjunction with ACM CCS, October 30, 2003.

53. "Privacy Preserving K-Means Clustering over Vertically Partitioned Data" at the Ninth ACM SIGKDD International Conference on Knowledge Discovery and Data Mining, August 25, 2003.

54. "A new architecture for Privacy Preserving Data Mining" at the Workshop on Privacy, Security and Data Mining held in conjunction with ICDM, December 9, 2002.

55. "Privacy Preserving Data Mining" with Chris Clifton in CERIAS Security Seminar, February 27, 2002.

56. "A new architecture for Privacy Preserving Data Mining" in Indiana Center for Database Systems seminar, December 4, 2002.

PH.D. STUDENTS SUPERVISED

1. Qi Guo, A Formal Approach To The Role Mining Problem, co-advised with V. Atluri, August 2010. Employed at: Bed, Bath, and Beyond, Inc.

2. Heechang Shin, Security and Privacy in Personalized Mobile Service Environments, co-advised with V. Atluri, August 2010. Employed at: Associate Professor and Chair, Information Systems and Business Analytics Department at Iona College.

3. Haibing Lu, Boolean Matrix Decomposition with Extensions: Application to Role Mining, co-advised with V. Atluri, October 2011. Employed at: Professor and Department Co-Chair, Information Systems & Analytics at Santa Clara University.

4. Xiaoyun He, Privacy-Preserving Analysis of Graph-Structured Data, co-advised with N. Adam, October 2011. Employed at: Associate Professor at Auburn University - Montgomery.

5. Yuan Hong, Privacy-preserving Collaborative Optimization, October 2013. Employed at: Associate Professor at University of Connecticut.

6. Emre Uzun, Formal Security Analysis of Access Control Models and Their Spatiotemporal Extensions, co-advised with V. Atluri, October 2015. Employed at: Bilkent University.

7. Nazia Badar, Towards Automatic Configuration of Access Control, co-advised with V. Atluri, October '16. Employed at: California State University.

8. David Lorenzi, Enhancing Security and Usability from a Human Perspective on the World Wide Web, December 2016. Employed at: Wells Fargo.

9. Ussama Yaqub, Citizen Centric Stakeholder Theory: Sentiment and behavior Analysis in Social Media, October 2018. Employed at: Tenure Track Assistant Professor at Lahore University of Management Sciences.

10. Saptarshi Das, Policy Engineering in Attribute-Based Access Control, co-advised with S. Sural, August 2020. Employed at: Tenure Track Assistant Professor at JIS Institute of Advanced Studies and Research.

11. Hafiz Salman Asif, Privacy or Utility? How to Preserve Both in Outlier Analysis, co-advised with P. Papakonstantinou, December 2020. Employed at: Tenure Track Assistant Professor at Hofstra University.

12. Gunjan Batra, Policy Configuration and Management in Attribute Based Access Control, co-advised with V. Atluri, October 2021. Employed at: Tenure Track Assistant Professor at Kennessaw State University.

13. Abeer Elahraf, A Framework for Dynamic Composition and Management of Emergency Response Processes, co-advised with B. Shafiq, October 2021. Employed at: Rutgers University.

14. Nathaniel Hobbs, co-advised with P. Papakonstantinou (Expected Graduation: Spring '24)

15. Xinyue Wang (Expected Graduation: Spring '24)

16. Sitao Min (Expected Graduation: Fall '25)