Curriculum Vitae

Vijay Atluri

Professor
Management Science and Information Systems Department
Rutgers Business School, Newark and New Brunswick
Rutgers University
Newark, NJ 07102
973-353-1642 (phone), 973-353-5003 (fax)
email: atluri at rutgers dot edu
home page: http://sites.rutgers.edu/vijay-atluri/

EDUCATION:

- **Ph.D.**, Information Technology, May, 1994, George Mason University, Fairfax, VA.
  Dissertation: Concurrency Control in Multilevel Secure Databases
- **M.Tech.**, Electronics and Communication Engineering, (Controls and Automation), June 1979, Indian Institute of Technology, Kharagpur, India.
  Thesis: Implementation of Nearest Neighbour Identification Algorithms
- **B.Tech.** Electronics and Communications Engineering, May 1977, Jawaharlal Nehru Technological University, Kakinada, India

EXPERIENCE:

- **Professor**, MSIS Dept., Rutgers University. July 2006 - present; Associate Professor, July 2001 - June 2006; Assistant Professor, July 1995 - June 2001; Visiting Assistant Professor, Sept 1994- June 1995
- **Director**, Masters in Information Technology & Analytics, 2005- 2011, 2015 -
- **Visiting Professor**, Department of Electrical Engineering, Princeton University, September, 2014 - December 2014
- **Program Director**, National Science Foundation, Division of Information and Intelligent Systems (CISE/IIS), Information Integration and Informatics (III) and Secure and Trustworthy Cyberspace (SaTC). September 2011 - September 2013.
- **Director**, Center for Information Management, Integration and Connectivity (CIMIC), Rutgers University, 2022 - present; Research Director - 2002 - 2022; Faculty Associate - September 1994 - December 2001
- **Computer Scientist**, National Institute of Standards & Technology, Information Technology Laboratory, Computer Security Division, Systems & Network Security Group, February 2007 - February 2011
- **Visiting Associate Professor**, Computer Science Department, New Jersey Institute of Technology. July 2004 - June 2005
- **Member**, Graduate School-Newark Faculty of the Ph.D. in the Management program, Rutgers University. October 1996 - present
- **Research Assistant**, Center for Secure Information Systems, George Mason University. August 1990 - August 1994
- **Assistant Professor**, Dept. of Electronics & Communication and Computer Engineering, Nagarjuna University, India. March 1985 - August 1990
- **Lecturer**

- Dept. of Electronics & Communication and Computer Engineering, Nagarjuna University, India. December 1983 - March 1985
- Dept. of Electronics & Communication Engineering, Andhra University, India. December 1982 - December 1983
- Dept. of Electronics & Communication Engineering, Nagarjuna University, India. August 1980 - December 1982

RESEARCH INTERESTS:

Information Security, Privacy, Data Management, Worklfow Systems, Data Analytics, Cloud Computing, Distributed Systems, Business Process Management, Multimedia, Semantic web

TEACHING INTERESTS:

Database Management Systems, Distributed Databases, Computer Information Systems, Information Systems Security, Formal models of Computer Security, Electronic Commerce, Multimedia Information Systems, Operating Systems, Computer Architecture, Programming Languages, Object-Oriented Systems, and Computer Networking

HONORS and SCHOLARLY RECOGNITION:

- Distinguished Alumni of College of Engineering, Kakinada, Nagarjuna University, India, Recognized 2022.
- Dean's Meritorious Research Award, 2017
- Silver Core, International Federation for Information Processing, 2014.
- Outstanding Research Award from the IFIP WG11.3 Data and Applications Security and Privacy, 2014.
- Research Award for untenured faculty for outstanding research contributions, Rutgers University, 1999
- The CAREER Award from National Science Foundation, 1996
- National Merit Scholarship from the Government of India, June 1970 - May 1977
- Vice-Chair, ACM SIGSAC (Special Interest Group in Security, Audit, and Control), Elected, 2009 - 2013
- Secretary/Treasurer, ACM SIGSAC (Special Interest Group in Security, Audit, and Control), Elected, 2005 - 2009
- Senior Member, IEEE (December 2006 -)
- Chair, IFIP WG11.3 on Data and Application Security (July 2008 - June 2014)
- Finalist, Paul Nadler Teaching Excellence Award, Rutgers University, 1996, 1997, 1999
- Keynote Speaker, The Third International Conference on Availability, Reliability and Security, Barcelona, Spain, March 2008.
- Finalist, Research Award for untenured faculty, Rutgers University, 1998
- Listed in *Who's Who in Business Higher Education* 2005 -
- Listed in *International Who's Who of Professionals* 1997 -
- Listed in *International Who's Who of Information Technology* 1998 -
- Listed in *MARQUIS Who's Who in the World* 2000 -
- Best/Outstanding Paper Awards

1. Best Practice Paper Award, International Conference on Information Systems Security, 2019

2. Best Student Paper Award, 30th Annual IFIP WG 11.3 Conference on Data and Applications Security and Privacy (DBSec 16)
3. Nominated, 14th Annual International Conference on Digital Government Research (dg.o 2013)
4. Literati Network Award for the article Resource Sharing using DHS-UICDS Framework for Incident Management, published in Transforming Government: People, Process and Policy, 2013
5. Runner up, Best Student Paper Award, 27th Annual IFIP WG 11.3 Conference on Data and Applications Security and Privacy (DBSec 13)
6. Best Poster or Demo Award, 12th Annual International Conference on Digital Government Research (dg.o 2011)

MEMBERSHIPS:

- Member, IFIP WG11.3 on Data and Information Security (July 1994 -)
- Member, IEEE Technical Committee on Security and Privacy (May 1995 -)
- Member, IEEE Technical Committee on Data Engineering (May 1995 -)
- Member, IEEE Technical Committee on Multimedia (May 1996 -)
- Member, IEEE Technical Committee on Digital Libraries
- Member, IEEE Computer Society (Jan 1996 -)
- Member, Association for Computing Machinery (December 1996 -)

EXTERNAL GRANTS:

1. Principal Investigator, "IUCRC Phase I Rutgers, Newark: Center for Accelerated Real Time Analytics (CARTA)", $299,888, NSF, June 2018 - December 2021.
2. Co-Principal Investigator, "Secure and PrivAte Collaborative EnvironmentS (SPACES) for biomedical analytics", $1,072,401, National Institute of Health, January 2017 - December 2020. (Jaideep Vaidya, PI)
3. Principal Investigator, "I/UCRC: Center for Hybrid Multicore Productivity Research (CHMPR) - Rutgers Site", $300,000, NSF, August 2016 - July 2019.
4. Co-Principal Investigator, "BD Spokes: PLANNING: NORTHEAST: Cross-organization Big Data Cyber Attack Awareness," *National Science Foundation,* $99,600 - September 2016 - August 2017 - (John Yen, Penn State, PI)
5. Senior Personnel, "DIBBs: EI: Virtual Data Collaboratory: A Regional Cyberinfrastructure for Collaborative Data Intensive Science," $4,000,000, NSF, September 2016 - August 2020. (Manish Parashar, PI)
6. Principal Investigator, "Formal Security Analysis of Access Control Models and Extensions," *National Science Foundation,* $329,958, August 2010 - July 2015. (No Co-PIs)
7. Co-Principal Investigator, Social Media Alerts and Response to Threats to Citizens (SMART-C), SRI International, $43,676, Sept 2012 - Jan 2013.
8. Principal Investigator, "Information Sharing across States' Incident Management Systems using UICDS," United States Army Armament Research, Development and Engineering Center (ARDEC), $498,431, Oct 2009- Oct 2011.
9. Principal Investigator, "Research on Theoretical and Practical Aspects of Computer and Communications Security," *Army Research Office*, $10,000, September 2008 - February 2009. (No Co-PIs)
10. Principal Investigator, Evaluation of Secure Resource Sharing Approaches for Dynamic Ad-hoc Coalitions,*National Science Foundation*, $11,300, Sept 2008 - Feb 2009. (supplement)

11. Principal Investigator, "Computer and Communications Security: Issues and Research Directions," *Army Research Office*, $10,000, September 2007 - February 2008. (No Co-PIs)
12. Principal Investigator, "Access Control for Spatial Databases," *National Science Foundation,* $320,000, July 2003 - June 2006. (No Co-PIs)
13. Co-Principal Investigator, Improving Business Knowledge Management and Analysis Through the use of the RFID Technology and Semantic Web Services. $538,254, August 01, 2007 - June 30, 2009, SAP America. (Nabil R. Adam, PI)
14. Co-Principal Investigator, Technology Transfer: A Context Sensitive Alert Management System *National Science Foundation,* $50,000, Jul 2008 - June 2009.
15. Principal Investigator, "Security of Sensor Networks: Issues and Research Directions," *Army Research Office*, $10,000, September 2005 - February 2006. (No Co-PIs)
16. Co-Principal Investigator, "Secure Agency Interoperation for Effective Data Mining in Border Control and Homeland Security Applications," *National Science Foundation*, $1,050,000, July 2003 - June 2006. (Nabil Adam, PI) 30% effort
17. Co-Principal Investigator, "Improving Business Knowledge Management and Analysis Through the use of Semantic Web Services and RFID Technology," *SAP Research Labs*, $320,000, June 2004 - June 2007. (Nabil R. Adam, PI) 40% effort
18. Co-Principal Investigator, "Semantic Based Emergency Management System," *Department of Homeland Security*, $80,000, July 2005 - December 2005 (Nabil R. Adam, PI) 40% effort
19. Co-Principal Investigator, "A Study for Improving Business Intelligence Through the use of Text Mining and Ontology" *Relevant Noise*, $43,748, July 2005 - June 2006 (Nabil R. Adam, PI) 30% effort
20. Co-Principal Investigator, Meadowlands Environmental Research Institute, *Hackensack Meadowlands Development Commission*, $350,000, July 2005 - June 2006. (Nabil R. Adam, PI). 30% effort
21. Co-Principal Investigator, Municipal Technology Initiative, *Hackensack Meadowlands Development Commission*, $150,000, July 2005 - June 2006. (Nabil R. Adam, PI). 30% effort
22. Co-Principal Investigator, "Technology Transfer of Inter-agency e-Government Services and Their Transnational Feasibility Studies," *National Science Foundation*, $99,928 September, 2004 - August, 2005. (Nabil R. Adam, PI) 30% effort
23. Co-Principal Investigator, "A Decision Support System to Assess Urban Women's HIV Sexual Risk Behavior," *National Library of Medicine*, $398,000, Feb 2005 - Jan 2008. (Rachel Jones, PI) 30% effort
24. Principal Investigator, "Security of Sensor Networks: Issues and Research Directions," Army Research Office, $10,000, July 2004 - June 2005. (No Co-PIs)
25. Co-Principal Investigator, Meadowlands Environmental Research Institute, *Hackensack Meadowlands Development Commission*, $350,000, July 2004 - June 2005. (Nabil R. Adam, PI). 30% effort
26. Co-Principal Investigator, Municipal Technology Initiative, *Hackensack Meadowlands Development Commission*, $150,000, July 2004 - June 2005. (Nabil R. Adam, PI). 30% effort
27. Co-Principal Investigator, "Improving Business Knowledge Management and Analysis Through the use of Semantic Web Services and RFID Technology," *SAP Research Labs*, $320,000, June 2004 - July 2006. (Nabil R. Adam, PI). 30% effort
28. Principal Investigator, "Supporting Workflow, Long Duration and Nested Transaction Models in a Multilevel Secure Database Environment," *National Science Foundation*, The CAREER Award, $214,337, June 1996 - May 2000. (No Co-PIs)

29. Principal Investigator, "A Petri Net Based Approach to Enforcing Mandatory and Discretionary Security in Workflow Management Systems," *National Security Agency*, $59,986, October 1996 - December 1997. (No Co-PIs)
30. Co-Principal Investigator, "E-Government: Human-Centered Systems for Business Services," *National Science Foundation*, $916,949, June 2000 - May 2003. (Nabil R. Adam, PI) 30% effort
31. Co-Principal Investigator, Meadowlands Environmental Research Institute, *Hackensack Meadowlands Development Commission*, $8,000,000, Jan 2002 - December 2006. (Nabil R. Adam, PI) 25% effort
32. Co-Principal Investigator, "Spatially Integrated Coastal Permitting System," *National Oceanic and Atmospheric Administration* (NOAA), $87,750 September 2002 - August 2003. (Robert Ceberio, PI) 30% effort
33. Co-Principal Investigator, "Workshop on Advanced Technologies in Real-Time Monitoring and Modeling for Drinking Water Safety and Security," *Environmental Protection Agency*, $75,000, June 2002-December 2002. (Nabil R. Adam, PI) 30% effort
34. Co-Principal Investigator, "Exploratory Research on Reconfigurable and Scalable Enterprise Planning Systems," *National Science Foundation*, $99,743, July 2000 - June 2001. (Mohsen Jafari, PI) 20% effort
35. Co-Principal Investigator, "On Management Theory and Approach under Electronic Commerce Environment," *National Science Foundation of China*, 600,000BMR ($72,000), January 2001 - December 2003. (Prof. Deli Yang, Dallion Technology Institute, PI) 20% effort
36. Co-Principal Investigator, "Change Detection in Data Warehousing," *Lawrence Livermore National Laboratory*, $21,271, September 1, 1998 - June 30, 1999. (Nabil R. Adam, PI) 30% effort
37. Co-Principal Investigator, Meadowlands Environmental Research Institute, *Hackensack Meadowlands Development Commission*, $3,000,000, July 1998 - June 2003. (Nabil R. Adam, PI) 25% effort
38. Co-Principal Investigator, "Trader In Distributed Computing Environment," *National Security Agency*, $50,000, April 1998 - September 1998. (Yelena Yesha, PI) 25% effort

INTERNAL GRANTS:

1. Principal Investigator, "A Programmatic Approach to Cancer Treatment Discovery and Adverse Event Prevention Using Data Analytics," Rutgers University, $100,000, 2015-16.
2. Co-Principal Investigator, "The Rutgers University Research Initiative on Cybersecurity Economics (RICE)," Academic Excellence Fund (AEF), Rutgers University, $60,000, 2009-10.
3. Co-Principal Investigator, "information Technology for Emergency mAnageMent (iTEAM)," Academic Excellence Fund (AEF), Rutgers University, $40,000, 2007-08.
4. Principal Investigator, "Enforcing Security and Privacy Policies in a Mobile Commerce Environment," *Rutgers Business School*, $4000, July 2007 - June 2008.
5. Principal Investigator, "Efficient Enforcement of Security Policies in a Peer-to-Peer Mobile Environment," *Rutgers Business School*, $3000, July 2006 - June 2007.
6. Principal Investigator, "Spatio-temporal Indexing Structure for the CIMIC Image Database," *Meadowlands Environmental Research Institute*, $10,500, January 1, 2000 - December 31, 2000.
7. Co-Principal Investigator, "Strengthening the Electronic Commerce Certificate and Graduate Program at Rutgers Newark - Support for Resources," *Strategic Resources and Opportunity Analysis (SROA) Process,* $30,000, 1999-2000.

8. Co-Principal Investigator, "Developing and Implementing an Innovative Instruction Methodology for MSIS Courses," *GE Grant*, $14,000, 1988-99.

9. Principal Investigator, "A Multi-layered Clinical Decision Support System," *Rutgers FOM Research Grant*, $4,800, March 1997 - February 1998.

10. Principal Investigator, "Microsoft Access for SOM-ENG," *Newark Campus Computer Planning Committee,* $1,970, July 1996.

11. Co-Principal Investigator, "Computer Proficiency Assessment for Effective MIS Undergraduate Education," *Rutgers Dialogues Grant*, $6,100, January 1995 - June 1995.

RESEARCH PUBLICATIONS:

Book:

1. V. Atluri, S. Jajodia and B. George, Multilevel Secure Transaction Processing, Kluwer Academic Publishers, November 1999. ISBN 0-7923-7702-8, 144 pages.

Edited Book:

1. Encyclopedia of GIS (The book web site, http://refworks.springer-sbm.com/geograph/), ISBN-13: 978-0387308586, Springer; 1 edition, Field Editor, Geo-Security (Shashi Shekhar and Hui Xiong, Editors-in-Chief), December 2007.

Edited Refereed Journal Special Issues:

1. V. Atluri and C. Diaz(Ed.), Journal of Computer Security, Special Issue on European Symposium on Research in Computer Security, Volume 21, Number 3, 2013.
2. V. Atluri (Ed.), Journal of Computer Security, Special Issue on Data and Application Security, Volume 19, Number 3, 2011.
3. V. Atluri (Ed.), ACM Transactions on Information Systems Security, Special Issue on Computer and Communications Security, Volume 8, Number 1, February 2005.
4. V. Atluri and I. Ray (Eds.), Journal on Digital Libraries (JDL), Special Issue on Security, Volume 4, Number 3, 2004.
5. V. Atluri, A. Joshi and Y. Yesha (Ed.), The VLDB Journal, Special Issue on Semantic Web, Volume 12, Number 4, November 2003.
6. V. Atluri (Ed.), ACM Transactions on Information Systems Security, Special Issue on Role-Based Access Control, Volume 4, Number 3, August 2001.
7. V.Atluri and J. Hale (Eds.), Journal of Computer Security, Special Issue on Database Security, Volume 8, 2000
8. V. Atluri and J. Hale (Eds.), Research Advances in Database and Information Systems Security, Kluwer Academic Publishers, 2000, ISBN 0-7923-7848-2, 332 pages.
9. V.Atluri and P. Samarati (Eds.), Distributed and Parallel Databases: An International Journal, Special Issue on Security of Data and Transaction Processing", Vol.8, No.1, January 2000. ISBN 0926-8782, 145 pages.

Edited Refereed Proceedings:

1. V. Atluri and G. Pernul, "Data and Applications Security and Privacy XXVIII - 28th Annual IFIP WG 11.3 Conference, DBSec 2014, Vienna, Austria, July 14-16, 2014. Proceedings. Lecture Notes in Computer Science 8566, Springer 2014, ISBN 978-3-662-43935-7.
2. V. Atluri, J. Vaidya, A. Kern and M. Kantarcioglu (Eds.), 17th ACM Symposium on Access Control Models and Technologies, 2012. ISBN 978-1-4503-1295-0.
3. V. Atluri and C. Diaz (Eds.), "Proceedings of the 16th European Symposium on Research in Computer Security, Leuven, Belgium, September 12-14, 2011. Lecture Notes in Computer Science 6879, Springer 2011, ISBN 978-3-642-23821-5.
4. J. Bertot, K. Nahon, S. Chun, L. Luna-Reyes, V. Atluri (Eds.): Proceedings of the 12th Annual International Conference on Digital Government Research, 2011. ACM International Conference Proceeding Series, Digital Government Research Center 2011, ISBN 978-1-4503-0762-8.
5. V. Atluri (Ed.), "Proceedings of the 22nd IFIP Conference on Database Security, 2008, Springer, Lecture Notes in Computer Science, LNCS 5054, ISBN 978-3-540-70566-6.
6. A. Bagchi and V. Atluri (Eds.), "Proceedings of the Second International confernce on Information Systems Security," 2006, Lecture Notes in Computer Science, LNCS 4332. ISBN 978-3-540-68962-1
7. V. Atluri, C. Meadows and A. Juels (Eds.), Proceedings of the 12th ACM Conference on Computer and Communications Security, 2005, 407 pages, ISBN 1-59593-226-7.
8. V. Atluri, B. Pfitzmann and P. McDaniel (Eds.), Proceedings of the 11th ACM Conference on Computer and Communications Security, 2004, 363 pages, ISBN 1-58113-971-3.
9. S. Jajodia, V. Atluri and T. Jaeger (Eds.), 10th ACM Proceedings on Computer and Communications Security, 2003, 364 pages, ISBN 1-58113-738-9.
10. R. Sandhu and V. Atluri (Eds.), 9th ACM Proceedings on Computer and Communications Security, 2002, 274 pages, ISBN 1-58113-612-9.
11. V. Atluri (Ed.) Proceedings of the 5th ACM Workshop on Role-Based Access Control, ACM Press, 2000, ACM ISBN: 1-58113-259-X

Refereed Book Chapters:

1. S. Yu, V. Atluri and N. Adam, "Preview: Optimizing View Materialization Cost in Spatial Data Warehouses," in Complex Data Warehousing and Knowledge Discovery for Advanced Retrieval Development: Innovative Methods and Applications" in the series Advances in Data Warehousing and Mining, IGI Press.
2. S. Chun and V. Atluri, "Risk-based Access Control for Personal Data Services," Indian Statistics Institute Platinum Jubilee Monograph Series, World Scientific Press, 2008.
3. V. Atluri and J. Warner, "Security for Workflow Systems," in Handbook of Database Security: Applications and Trends, Springer, 2007, pages 213-230.
4. V. Atluri and H. Shin, "Efficiently Enforcing the Security and Privacy Policies in a Mobile Environment," in Handbook of Database Security: Applications and Trends, Springer, 2007, pages 553-574.
5. S. Chun and V. Atluri, "Geospatial Database Security," in Handbook of Database Security: Applications and Trends, Springer, 2007, pages 247-266.
6. S. Chun and V. Atluri, "Geospatial Security Models," in Encyclopedia of Geographic Information Science, Springer, December 2007.
7. V. Atluri and H. Shin, " Efficient Enforcement of Authorizations in Geospatial Databases," in Encyclopedia of Geographic Information Science, Springer, December 2007.

8. J. Vaidya and V. Atluri, "Privacy, Profiling, Targeted Marketing, and Data Mining," in Digital Privacy: Theory, Technologies and Practices, edited by Alessandro Acquisti, Sabrina De Capitani di Vimercati, Stefanos Gritzalis and Costas Lambrinoudakis, Auerbach Publications (Taylor and Francis Group), 2007, pages 117-134.
9. V. Atluri, "Mobile Commerce," in The Handbook of Computer Networks, Volume III Distributed Networks, Network Planning, Control, Management and Applications, Part 3: Computer Network Popular Applications, 2006.
10. V. Atluri, "Mobile Commerce," in The Handbook of Information Security, Volume I, Key Concepts, Infrastructure, Standards and Protocols, John Wiley & Sons Inc., pages 254-267.
11. R. Clark, N. R. Adam, V. Atluri, M. Halem, E. Vowinkel, P. C. Tao, L. Cummings, E. A. Ibrahim, "Developing an Early Warning System for Drinking Water Safety and Security," Water Supply Systems Security, McGraw Hill, 2004, pages 8.1-8.19.
12. N. Adam, V. Atluri, D. Guo and S. Yu, "Challenges in Environmental Data Warehousing and Mining," in Data Mining: Next Generation Challenges and Future Directions, edited by H. Kargupta, A. Joshi, K. Sivakumar, and Y. Yesha, AAAI (American Association for Artificial Intelligence), 2004, pages 335-355.
13. V. Atluri, S. Chun, R. Holowczak, and N. R. Adam, "Automating the Delivery of Governmental Business Services Through Workflow Technology," in *Advances in Digital Government:Technology, Human Factors, and Policy* (eds.) William J. McIver and Ahmed K. Elmagarmid, Kluwer Academic Publishers, 2002, pages 69-84.
14. N.R. Adam, V. Atluri and Y. Yesha, "Electronic Commerce: Technological Challenges," *McGraw-Hill 2000 Yearbook of Science & Technology,* pages 143-146.

Refereed Journal Articles:

1. E. Gupta, S. Sural, J. Vaidya and V. Atluri, Enabling Attribute-based Access Control in NoSQL Databases, IEEE Transactions on Emerging Topics in Computing, accepted, 2022.
2. U. Yaqub, S. Chun, V. Atluri and J, Vaidya, Analyzing social media messages of public sector organizations utilizing sentiment analysis and topic modeling, Information Polity 26(4): 375-390, 2021.
3. A. Roy, S. Sural, A. Majumdar, J. Vaidya and V. Atluri, Enabling Workforce Optimization in Constrained Attribute-Based Access Control Systems. IEEE Transactions on Emerging Topics in Computing. 9(4): pages 1901-1913, 2021.
4. A. Roy, S. Sural, A. Majumdar, J. Vaidya and V. Atluri, Optimal Employee Recruitment in Organizations under Attribute-Based Access Control. ACM Transactions on Management Information Systems 12(1), pages 1-24, 2021.
5. U. Yaqub, N. Sharma, R. Pabreja, S. Chun, V. Atluri and J. Vaidya, Location-based Sentiment Analyses and Visualization of Twitter Election Data. Digital Government Research and Practice 1(2): 14:1-14:19, 2020.
6. H. Lu, X. Chen, J. Shi, J. Vaidya, V. Atluri, Y. Hong and W. Huang, Algorithms and Applications to Weighted Rank-one Binary Matrix Factorization. ACM Transactions on Management Information Systems 11(2): 7:1-7:33, 2020.
7. M. P. Singh, S. Sural, J. Vaidya and V. Atluri, Managing attribute-based access control policies in a unified framework using data warehousing and in-memory database. Computers & Security 86: 183-205, 2019.
8. G. Batra, V. Atluri, J. Vaidya and S. Sural, Deploying ABAC policies using RBAC systems. Journal of Computer Security 27(4): 483-506, 2019.

9. S. Das, S. Sural, J. Vaidya and V. Atluri, Policy Adaptation in Hierarchical Attribute-based Access Control Systems. ACM Transactions on Internet Technology 19(3): 40:1-40:24, 2019.
10. S. Jha, S. Sural, V. Atluri and J. Vaidya Security Analysis of ABAC under an Administrative Model, IET Information Security 13(2): 96-103, 2019.
11. D. Lorenzi, E. Uzun, J. Vaidya, S. Sural and V. Atluri, "Towards Designing Robust CAPTCHAs," Journal of Computer Security, 26(2): 2018, pp. 255-281.
12. S. Jha, S. Sural, V. Atluri and J. Vaidya, "Specification and Verification of Separation of Duty Constraints in Attribute based Access Control," IEEE Transactions on Information Forensics and Security, 13(4), April 2018, pp. 897-911.
13. H. Gupta, S. Sural, V. Atluri and J. Vaidya, "A Side-channel Attack on Smartphones: Deciphering Key Taps using Built-in Microphones," Journal of Computer Security, 26(2), January 2018, pp. 255-281.
14. S. Das, S. Sural, J. Vaidya, and V. Atluri, HyPE: A Hybrid Approach toward Policy Engineering for Attribute-Based Access Control, IEEE Letters of the Computer Society, — Volume 1, Issue 2, page 25-29, 2018.
15. U. Yaqub, S. Chun, V. Atluri and J. Vaidya, "Analysis of Political Discourse on Twitter in the Context of the 2016 US Presidential Elections", Government Information Quarterly, 34(4), December 2017, pp. 613-626.
16. B. Mitra, S. Sural, J. Vaidya and V. Atluri, "Migrating from RBAC to Temporal RBAC", IET Information Security, 11(5): 294-300, 2017.
17. A. Roy, S. Sural, A. Majumdar, J. Vaidya and V. Atluri, "On Optimal Employee Assignment in Constrained Role Based Access Control Systems", ACM Transactions on Management Information Systems, 7(4), pp. 10:1 - 10:24, January 2017.
18. B. Mitra, S. Sural, J. Vaidya and V. Atluri, "Mining Temporal Roles using Many-Valued Concepts", Computers & Security, 60, pp. 79 - 94, July, 2016.
19. B. Mitra, S. Sural, J. Vaidya and V. Atluri, "A Survey of Role Mining," ACM Computing Surveys, 48(4), pp. 50:1 - 50:37, 2016.
20. N. Badar, J. Vaidya, V. Atluri, N. Verde and J. Warner, "Using classification for role-based access control management, International Journal of Technology Policy and Management," International Journal of Technology, Policy and Management, 16(1), pp. 45-78, 2016.
21. D. Lorenzi, S. Chun, J. Vaidya, V. Atluri, N. Adam, "PEER: A Framework for Public Engagement in Emergency Response," International Journal of E-Planning Research, 4(3) pp. 29-46, 2015.
22. A. Roy, S. Sural, A. Mazumdar, J. Vaidya and V. Atluri, "Minimizing Organizational User Requirement while meeting Security Constraints," ACM Transactions on Management Information Systems, 6(3):12, 2015.
23. B. Mitra, S. Sural, V. Atluri and J. Vaidya, "The Generalized Temporal Role Mining Problem, Journal of Computer Security, 23(1): 31-58, 2015.
24. H. Lu, J. Vaidya, V. Atluri, Y. Li, "Statistical Database Auditing Without Query Denial Threat," INFORMS Journal on Computing, 27(1): 20-34, 2015.
25. P. Harika, M. Nagajyothi, J.C. John, S. Sural, J. Vaidya and V. Atluri, "Meeting Cardinality Constraints in Role Mining", IEEE Transactions on Dependable and Secure Computing, 12(1), pages 71-84, 2015.
26. E. Uzun, V. Atluri, J. Vaidya, S. Sural, A. Ferrara, G. Parlato, P. Madhusudan, "Security Analysis for Temporal Role Based Access Control," Journal of Computer Security, 22(6), pp. 961-996, 2014.
27. S. Jha, S. Sural, J. Vaidya and V. Atluri, "Security Analysis of Temporal RBAC under an Administrative Model, Computers & Security, 46, pp. 154-172, October 2014.

28. H. Lu, J. Vaidya, and V. Atluri, "An Optimization Framework for Role Mining," Journal of Computer Security, Journal of Computer Security, 22(1), pp. 1-31, January, 2014.
29. D. Lorenzi, J. Vaidya, S. Chun, B. Shafiq, G. Nabi, and V. Atluri, "Enhancing the Government Service Experience through QR Codes on Mobile Platforms," Government Information Quarterly, 31(1), pp. 6-16, January, 2014.
30. M. Sharma, S. Sural, J. Vaidya, V. Atluri, "AMTRAC: An Administrative Model for Temporal Role-based Access Control," Computers & Security, Volume 39, Part B, November, Pages 201-218, 2013.
31. V. Atluri, B. Shafiq, J. Vaidya, S. Chun and G. Nabi, "Resource Sharing using DHS-UICDS Framework for Incident Management," Transforming Government: People, Process and Policy, 2013 (Outstanding Paper Award Winner at the Literati Network Awards for Excellence 2013).
32. H. Lu, J. Vaidya, V. Atluri and Y. Hong, "Constraint-Aware Role Mining via Extended Boolean Matrix Decomposition," IEEE Transactions on Dependable and Secure Computing, Volume 9, Number 5, pages, 655-669, 2012.
33. X. He, J. Vaidya, B. Shafiq, N. Adam and V. Atluri, "Structure-aware graph anonymization," Web Intelligence and Agent Systems 10(2): 193-208, 2012.
34. H. Shin, V. Atluri and J. Cho, "Efficiently enforcing spatiotemporal access control under uncertain location information," Journal of Computer Security, 19(3): 607-637, 2011.
35. S. Mondal, S. Sural and V. Atluri, "Security Analysis of GTRBAC and its Variants using Model Checking," Computers & Security, 30(2-3): 128-147 (2011).
36. H. Shin, J. Vaidya and V. Atluri, "A Profile Anonymization Model for Location Based Services," Journal of Computer Security, 19(5): 795-833, 2011.
37. D. Ferraiolo, V. Atluri, S. Gavrila, "The Policy Machine: A Novel Framework for Access Control Policy Specification and Enforcement," Journal of Systems Architecture, Elsevier, Vol. 57, No. 4, April 2011, pages 412-424.
38. J. Vaidya, V. Atluri and Q. Guo, "The Role Mining Problem: Finding a Minimal Descriptive Set of Roles," ACM Transactions on Information Systems Security (invited paper), Volume 13, Issue 3, July 2010.
39. V. Janeja, N.R. Adam, V. Atluri and J. Vaidya, "Spatial Neighborhood based Anomaly Detection in High Dimensional Spatio-temporal Sensor Datasets," *Journal of Data Mining and Knowledge Discovery,* Volume 20, Issue 2 (2010), pages 221-258.
40. H. Shin, J. Vaidya and V. Atluri, "Anonymization Models for Directional Location Based Service Environments," *Computers & Security*, Volume 29, Issue 1, February 2010, pages 59-73.
41. L. Qin and V. Atluri, "Semantics-aware Security Policy Specification for the Semantic Web Data," *International Journal of Information and Computer Security,* Vol. 4, No. 1, 2010.
42. V. Atluri, Q. Guo, H. Shin and J. Vaidya, "Towards a Unified Index Structure for Spatiotemporal Data and Authorizations," *International Journal of Information and Computer Security,* Vol.4, No.2, 2010.
43. J. Vaidya, V. Atluri, J. Warner and Q. Guo "Role Engineering via Prioritized Subset Enumeration," *IEEE Transactions on Dependable and Secure Computing*, Vol.7, No.3, 2010.
44. D. Guo, H. Xiong, V. Atluri and N. Adam, "Object Discovery in High-Resolution Remote Sensing Images: A Semantic Perspective," Knowledge and Information Systems (invited paper), Volume 19, Number 2, May 2009, pages 211-233.
45. J. Vaidya, V. Atluri, Q. Guo and H. Lu, "Edge-RMP: Minimizing Administrative Assignments for Role-based Access Control," Journal of Computer Security, Volume 17, Number 2, 2009, pages 211-235.
46. V. Janeja and V. Atluri, "Spatial Outlier Detection in Heterogeneous Neighborhoods," *Intelligent Data Analysis - An International Journal*, Volume 13(1), 2009, pages 85-107.

47. L. Qin and V. Atluri, "Evaluating the validity of data instances against ontology evolution over the Semantic Web," *Information & Software Technology*, Volume 51, Issue 1, pages 83-97, January 2009.
48. V. Janeja and V. Atluri, "Random Walks to Identify Anomalous Free-Form Spatial Scan Windows," *IEEE Transactions on Knowledge and Data Engineering*, Volume 20, Number 11, November 2008.
49. V. Atluri, H. Shin and J. Vaidya, "Efficient Security Policy Enforcement for the Mobile Environment," Journal of Computer Security, Volume 16, Number 4, 2008, pages 439-475.
50. V. Atluri, S. Chun, R. Mukkamala and P. Mazzoleni, "A Decentralized Workflow Execution Model for Inter-organizational Workflows," *Distributed and Parallel Databases*, Volume 22, Number 1, August, 2007, pages 55-83.
51. V. Atluri and S. Chun, "An Authorization System for Geospatial Image Databases," *International Journal of Information and Computer Security,* Vol. 1, No. 1/2, 2007, pages 143-168.
52. L. Qin and V. Atluri, "SemDiff: An Approach to Detecting Semantic Changes to Ontologies," *International Journal on Semantic Web and Information Systems*, 2(4), 1-16, October-December 2006, pages 1-32.
53. L. Qin and V. Atluri, An Ontology-Guided Approach to Change Detection to the Semantic Web Data, *Journal on Data Semantics*, V, 2006, pages 130-157.
54. S. Chun, V. Atluri, N.R. Adam, "Using Semantics for Policy-based Composition of Web Services," *Distributed and Parallel Databases: An International Journal,* Volume 18, Number 1, July 2005, pages 37 - 64.
55. V. Atluri and S. Chun, "An Authorization Model for Geo-spatial Data," *IEEE Transactions on Dependable and Secure Computing*, October-December, 2004, Vol.1, No. 4, pages 238-254.
56. V. Atluri, S. Chun and P. Mazzoleni, "Chinese Wall Security for Decentralized Workflow Management Systems," *Journal of Computer Security*, Volume 12, Number 6, 2004, pages 799-840.
57. V. Atluri and R. Mukkamala "Employing an Extended Transaction Model in Multilevel Secure Transaction Processing," *Informatica,* An International Journal of Computing and Informatics, Special Issue on Security, Volume 26, 2002, pages 105-115.
58. E. Ferrari, N.R. Adam, V. Atluri, E. Bertino and U. Capuozzo, "An Authorization System for Digital Libraries," *The VLDB Journal (The International Journal on Very Large Data Bases)*, Volume 11, issue 1, 2002, pages 58-67.
59. N.R. Adam, V. Atluri, E. Bertino and E. Ferrari, "A Content-based Authorization Model for Digital Libraries," *IEEE Transactions on Knowledge and Data Engineering*, Volume 14, Number 2, 2002, pages 296-315.
60. V. Atluri and A. Gal, "An Authorization Model for Temporal and Derived Data: Securing Information Portals," *ACM Transactions on Information Systems Security,* Volume 5, Number 1, 2002, pages 62-94.
61. V. Atluri, Security for Workflow Systems, *Information Security Technical Report,* Volume 6, Number 2, 2001, Elsevier Science, pages 59-68.
62. N.R. Adam, V. Atluri, I. Adiwijaya and S. Banerjee, "A Dynamic Manifestation Approach for Providing Universal Access to Digital Library Objects," *IEEE Transactions on Knowledge and Data Engineering*, Volume 13, Number 4, 2001, pages 705-716.
63. S. Jajodia, V. Atluri, T.F. Keefe, C. McCollum, and R. Mukkamala, "Multilevel Secure Transaction Processing," *Journal of Computer Security*, Volume 9, Issue 3, 2001, pages 165-195.
64. V. Atluri and W-K. Huang, "A Petri Net Based Safety Analysis of Workflow Authorization Models," *Journal of Computer Security*, Volume 8, Issue 2/3, 2000, pages 209-240.
65. N. Adam, V. Atluri and I. Adiwijaya, System Integration in Digital Libraries, *Communications of the ACM*, June 2000, Volume 43, Number 6, pages 64-72.

66. V. Atluri, W-K. Huang and E. Bertino, "A Semantic Based Execution Model for Multilevel Secure Workflows," *Journal of Computer Security*, Special Issue on Database Security, eds. T.Y. Lin and Shelly Qian, Volume 8, Number 1, 2000, pages 3-41.
67. E. Bertino, E. Ferrari and V. Atluri, "The Specification and Enforcement of Authorization Constraints in Workflow Management Systems," *ACM Transactions on Information Systems Security,* Volume 2, Number 1, February 1999, pages 65-104.
68. N.R. Adam, V. Atluri and W-K. Huang, "Modeling and Analysis of Workflows Using Petri Nets," *Journal of Intelligent Information Systems*, Special Issue on Workflow and Process Management, Volume 10, Number 2, March 1998, pages 131-158.
69. V. Atluri and W-K. Huang, "Enforcing Mandatory and Discretionary Security in Workflow Management Systems," invited paper, *Journal of Computer Security,*, Special Issue on Database Security, eds. Pierangela Samarati and Ravi Sandhu, Vol. 5, No. 4, 1997, pages 303-339.
70. V. Atluri, S. Jajodia and E. Bertino, "Transaction Processing in Multilevel Secure Databases using Kernelized Architecture: Challenges and Solutions," *IEEE Transactions on Knowledge and Data Engineering*, Vol. 9, No. 5, 1997, pages 697-708.
71. V. Atluri, E. Bertino, and S. Jajodia, "A Theoretical Framework for Degrees of Isolation in Databases," *Information and Software Technology*, Elsevier Science, Vol. 39, No. 1, 1997, pages 47-53.
72. V. Atluri, S. Jajodia, and E. Bertino, "Alternative Correctness Criteria for Concurrent Execution of Transactions in Multilevel Secure Databases," *IEEE Transactions on Knowledge and Data Engineering*, Vol. 8, No. 5, 1996, pages 839 - 854.
73. P. Ammann, V. Atluri, and S. Jajodia, "The Partitioned Synchronization Rule for Planar Extendible Partial Orders," *IEEE Transactions on Knowledge and Data Engineering*, Vol. 7, No. 5, 1995, pages 797 - 808.
74. V. Atluri, E. Bertino, and S. Jajodia, "Achieving Stricter Correctness Requirements in Multilevel Secure Database Management Systems," *Journal of Computer Security*, Vol. 2, No. 4, 1993, pages 311-351.

Unrefereed Journal Articles:

1. D. Ferraiolo, V. Atluri and S. Gavrila, "The Policy Machine: A Standards-Driven Enterprise-Wide Access Control Enforcement Mechanism," Defense Standardization Program Journal, July/December 2008, pages 87-92.

Refereed Conference Publications:

1. S. Talegaon, G. Batra, V. Atluri, S. Sural and J. Vaidya, Contemporaneous Update and Enforcement of ABAC Policies, ACM Symposium on Access Control Models and Technologies, June 2022, pp 31-42.
2. H. Varshith, S. Sural, J. Vaidya and V. Atluri, Enabling Attribute-Based Access Control in Linux Kernel. ACM Asia Conference on Computer and Communications Security (AsiaCCS) 2022: 1237-1239.
3. G. Batra, V. Atluri, J. Vaidya and S. Sural, Incremental Maintenance of ABAC Policies, ACM Conference on Data and Application Security and Privacy, pages 185-196, 2021.
4. E. Gupta, S, Sural, J. Vaidya and V. Atluri, Attribute-Based Access Control for NoSQL Databases. ACM Conference on Data and Application Security and Privacy, pages 317-319, 2021.
5. S. Chun, R. Singh, P. Morgan, N. Adam and V. Atluri, Visual Analytics for Global Migration Policy Discovery and NGO Collaboration. International Conference on Digital Government Research, 2020: 109-115.

6. A. Meshram, S. Das, S. Sural, J. Vaidya and V. Atluri, ABACaaS: Attribute-Based Access Control as a Service. ACM Conference on Data and Application Security and Privacy, 2019: 153-155.
7. U. Yaqub, S. Chun, V. Atluri and J. Vaidya, Social Media Communication of Public Sector Organizations: A Case Study of Northeast US. International Conference on Digital Government Research, 2019: 248-253.
8. R. Singh, S. Chun and V. Atluri, Developing Machine Learning Models to Automate News Classification. International Conference on Digital Government Research, 2020: 354-355.
9. S. Chun, V. A. Paturu, S. Yuan, R. Pathak, V. Atluri and N. R. Adam, Crime Prediction Model using Deep Neural Networks. International Conference on Digital Government Research, 2019: 512-514. (**Best Poster award**)
10. S. Das, S. Sural, J. Vaidya, V. Atluri and G. Rigoll: VisMAP: Visual Mining of Attribute-Based Access Control Policies. International Conference on Information Systems Security, 2019: 79-98.
11. G. Batra, V. Atluri, J. Vaidya and S. Sural, Policy Reconciliation and Migration in Attribute Based Access Control. International Conference on Information Systems Security, 2019: 99-120. (**Best Practice Paper Award**)
12. R. Nath, S. Das, S. Sural, J. Vaidya, V. Atluri, PolTree: A Data Structure for Making Efficient Access Decisions in ABAC. ACM Symposium on Access Control Models and Technologies, 2019: 25-35.
13. S. Das, B. Mitra, V. Atluri, J. Vaidya and S. Sural, Policy Engineering in RBAC and ABAC. From Database to Cyber Security 2018: 24-54.
14. N. Sharma, R. Pabreja, U. Yaqub, V. Atluri, S. Chun and J. Vaidya, Web-based application for sentiment analysis of live tweets. International Conference on Digital Government Research, 2018: 120:1-120:2.
15. G. Batra, V. Atluri, J. Vaidya and S. Sural, "Enabling the deployment of ABAC policies in RBAC systems", 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.
16. S. Das, S. Sural, J. Vaidya and V. Atluri,"Poster: Using Gini Impurity to Mine Attribute-based Access Control Policies with Environment Attributes", in Proceedings of the 23rd ACM Symposium on Access Control Models and Technologies (SACMAT), poster track, June 13 - 15, 2018, Indianapolis, IN, USA.
17. U. Yaqub, N. Sharma, R. Pabreja, S. Chun, V. Atluri and J. Vaidya, "Analysis and Visualization of Subjectivity and Polarity of Twitter Location Data", in Proceedings of the 19th Annual International Conference on Digital Government Research (dg.o 2018), 30 May - 1 June, 2018, Delft, the Netherlands.
18. S. Das, S. Sural, J. Vaidya and V. Atluri, "Policy Adaptation in Attribute-Based Access Control for Inter-organizational Collaboration," The 3rd IEEE International Conference on Collaboration and Internet Computing October, 2017.
19. T. Talukdar, G. Batra, J. Vaidya, V. Atluri and S. Sural, "Efficient bottom-up Mining of Attribute Based Access Control Policies," The 3rd IEEE International Conference on Collaboration and Internet Computing October, 2017.
20. M. Gautam, S. Jha, S. Sural, J. Vaidya and V. Atluri, "Poster: Constrained Policy Mining in Attribute Based Access Control," ACM on Symposium on Access Control Models and Technologies, pp 121-123, 2017.
21. E. Uzun, G. Parlato, V. Atluri, A. Ferrara, J. Vaidya, S. Sural and D. Lorenzi, "Preventing Unauthorized Data Flows," in Proceedings of the 31st IFIP WG 11.3 Conference on Data and Applications Security and Privacy (DBSEC), July, 2017, Philadelphia, USA.

22. U. Yaqub, S. Chun, V. Atluri and J. Vaidya, "Sentiment based Analysis of Tweets during the US Presidential Elections", Proceedings of the 18th Annual International Conference on Digital Government Research (dg.o 2017), June 7-9, 2017, Staten Island, NY, USA.
23. D. Lorenzi, J. Vaidya, A. Aich, S. Sural, V. Atluri and J. Calca, "EmojiTCHA: Using Emotion Recognition to Tell Computers and Humans Apart," 32nd International Conference on ICT Systems Security and Privacy Protection (IFIP SEC 2017), May 2017.
24. S. Jha, S. Sural, V. Atluri and J. Vaidya, "An Administrative Model for Collaborative Management of ABAC Systems and its Security Analysis" (Invited paper), in Proceedings of the 2nd IEEE International Conference on Collaboration and Internet Computing, Nov 1-3, 2016, Pittsburgh, PA, USA.
25. U. Yaqub, V. Atluri and J. Vaidya, "Efficient Evaluation of Authorizations for Video Data", in Proceedings of the 9th International Conference on Security of Information and Networks, Newark, NJ, USA, July 20-22, 2016.
26. H. Gupta, S. Sural, V. Atluri and J. Vaidya, "Deciphering Text from Touchscreen Key Taps", in Proceedings of the 30th IFIP WG 11.3 Conference on Data and Applications Security and Privacy (DBSEC), July 18-21, 2016, Trento, Italy (**Best Student Paper Award**).
27. P. Sarana, A. Roy, S. Sural, J. Vaidya and V. Atluri, "Role Mining in the Presence of Separation of Duty Constraints," in Proceedings of the 11th International Conference on Information Systems Security (ICISS 2015), December, 2015, Kolkata, India.
28. S. Jha, S. Sural, V. Atluri and J. Vaidya, "Enforcing Separation of Duty in Attribute based Access Control Systems," in Proceedings of the 11th International Conference on Information Systems Security (ICISS 2015), December, 2015, Kolkata, India.
29. M. Singh, S. Sural, V. Atluri, J. Vaidya and U. Yaqub, "Managing Multi-dimensional Multi-granular Security Policies using Data Warehousing," 9th International Conference on Network and System Security, November 2015.
30. J. Vaidya, B. Shafiq, V. Atluri and D. Lorenzi, "A framework for policy similarity evaluation and migration based on change detection," 9th International Conference on Network and System Security, November 2015.
31. E. Uzun, D. Lorenzi, V. Atluri, J. Vaidya, S. Sural, "Migrating from DAC to RBAC," 29th Annual IFIP WG 11.3 Conference on Data and Applications Security and Privacy, pp 69-84, July 2015.
32. D. Lorenzi, P. Chattopadhyay, E. Uzun, J. Vaidya, S. Sural, V. Atluri, "Generating Secure Images for CAPTCHAs through Noise Addition," ACM Symposium on Access Control Models and Technologies, 169-172, June 2015. (Demo Paper)
33. D. Lorenzi, E. Uzun, J. Vaidya, S. Sural, V. Atluri, "Enhancing the Security of Image CAPTCHAs Through Noise Addition," IFIP International conference on Security and Privacy, pp 354-368, June 2015.
34. S. Jha, S. Sural, J. Vaidya and V. Atluri, "Temporal RBAC Security Analysis using Logic Programming in the Presence of Administrative Policies," in Proceedings of the 10th International Conference on Information System s Security (ICISS 2014), December 16 - 20, 2014, Hyderabad, India.
35. D. Lorenzi, J. Vaidya, B. Shafiq, S. Chun, N. Vegesna, Z. Alzamil, N. Adam, S. Wainer and V. Atluri, "Utilizing social media to improve local government responsiveness", 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.
36. S. Hachana, F. Cuppens, N. Cuppens-Boulahia and V. Atluri, "Policy Mining: a Bottom-Up Approach Toward a Model Based Firewall Management," in Proceedings of the 9th International Conference on Information Systems Security (ICISS 2013), 16-20 December 2013, ISI Kolkata, India.

37. D. Lorenzi, J. Vaidya, S. Sural and V. Atluri, "Web Services Based Attacks against Image CAPTCHAs," in Proceedings of the 9th International Conference on Information Systems Security (ICISS 2013), 16-20 December 2013, ISI Kolkata, India.
38. M. Sharma, S. Sural, V. Atluri and J. Vaidya, "An Administrative Model for Spatio-Temporal Role based Access Control," in Proceedings of the 9th International Conference on Information Systems Security (ICISS 2013), 16-20 December 2013, ISI Kolkata, India.
39. B. Mitra, S. Sural, V. Atluri, and J. Vaidya, "Toward Mining of Temporal Roles," 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.
40. E. Uzun, V. Atluri, J. Vaidya, and S. Sural, "Analysis of TRBAC with Dynamic Temporal Role Hierarchies," 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.
41. D. Lorenzi, J. Vaidya, S. Chun, B. Shafiq, V. Naik, V. Atluri, and N. Adam, "Community Based Emergency Respones," in Proceedings of the 14th Annual International Conference on Digital Government Research, Laval University, Quebec City, Quebec, Canada, June 2013.
42. D. Lorenzi, J. Vaidya, E. Uzun, S. Sural and V. Atluri, "Attacking Image based CAPTCHAs using Image Recognition Techniques," International Conference on Information Systems Security, December 2012.
43. N. Badar, J. Vaidya, V. Atluri and B. Shafiq, "Risk based Access Control using Classification", Symposium on Configuration Analytics and Automation, October 2012.
44. D. Mehmood, B. Shafiq, J. Vaidya, Y. Hong, N. Adam and V. Atluri,"Privacy-Preserving Subgraph Discovery," *25th Annual IFIP WG 11.3 Conference on Data and Applications Security and Privacy,* July 2012, pages 161-176.
45. E. Uzun, V. Atluri, S. Sural, J. Vaidya, M. Parthasarathy, G. Parlato and A. Ferrara, "Analyzing Temporal Role Based Access Control Models," ACM Symposium on Access Control Models and Technologies, June, 2012, pages 177-186.
46. D. Lorenzi, B. Shafiq, J. Vaidya, G. Nabi, S. Chun and V. Atluri"Using QR Codes for Enhancing the Scope of Digital Government Services," International Conference on Digital Government Research, June 2012, pages 21-29.
47. J.C. John, S. Sural, V. Atluri and J. Vaidya, "Role Mining under Role-Usage Cardinality Constraint," IFIP International conference on Security and Privacy, June 2012, pages 150-161.
48. N. Verde, J. Vaidya, V. Atluri and A. Colantonio, "Role Engineering: From Theory to Practice," ACM Conference on Data and Application Security and Privacy, February 2012, pages 181-192.
49. E. Uzun, V. Atluri, H. Lu and J. Vaidya, "An Optimization Model for the Extended Role Mining Problem, *25th Annual IFIP WG 11.3 Conference on Data and Applications Security and Privacy,* July, 2011.
50. V. Atluri, B. Shafiq, S. Chun, G. Nabi and J. Vaidya, "UICDS-based Information Sharing among Emergency Response Application Systems," Proceedings of the 12th International Conference on Digital Government Research, Maryland, June 12-15, 2011 (**Best Demo/Poster Award**).
51. H. Lu, J. Vaidya, V. Atluri, H. Shin and L. Jiang, "Weighted Rank-One Binary Matrix Factorization," SIAM International Conference on Data Mining, April 2011. (acceptance ratio: 86/343)
52. V. Atluri, B. Shafiq, J. Vaidya, S. Chun, M. Trocchia, N. Adam, C. Doyle and L. Skelly, "Information Sharing Infrastructure for Pharmaceutical Supply Chain Management in Emergency Response," IEEE International Conference on Technologies for Homeland Security, November 2010.
53. J. Vaidya, V. Atluri, Q. Guo and H. Lu, "Effect of Noise on Mining Roles," *24th Annual IFIP WG 11.3 Conference on Data and Applications Security and Privacy,* June, 2010.

54. J. Vaidya, V. Atluri, B. Shafiq and N. Adam, "Privacy-preserving Trust Verification," ACM Symposium on Access Control Models and Technologies, June, 2010. (Acceptance Ratio: 19/82)
55. B. Shafiq, J. Vaidya, V. Atluri and S. Chun, UICDS Compliant Resource Management System for Emergency Response, International Conference on Digital Government Research, May 2010.
56. H. Lu, J. Vaidya, V. Atluri and Y. Hong, "Extended Boolean Matrix Decomposition," IEEE International Conference on Data Mining (ICDM), December 2009. (Acceptance Ratio: 70/786)
57. Y. Hong, X. He, J. Vaidya, N. Adam and V. Atluri, "Effective Anonymization of Query Logs," ACM Conference on Information and Knowledge Management, November 2009. (Acceptance Ratio: 171/847)
58. X. He, J. Vaidya, B. Shafiq, N. Adam and V. Atluri, "Preserving Privacy in Social Networks: A Structure-Aware Approach," IEEE/WIC/ACM International Conference on Web Intelligence, 2009. (acceptance ratio: 55/343)
59. H. Shin and V. Atluri, "Spatiotemporal Access Control Enforcement under Uncertain Location Estimates," *23rd Annual IFIP WG 11.3 Conference on Data and Applications Security,* July, 2009.
60. S. Mondal, S. Sural and V. Atluri, "Towards a Formal Security Analysis of GTRBAC using Timed Automata," ACM Symposium on Access Control Models and Technologies, June, 2009. (acceptance ratio: 24/75)
61. H. Lu, Y. Li, V. Atluri and J. Vaidya, "An Efficient Online Auditing Approach to Limit Private Data Disclosure," 12th International Conference on Extending Database Technology, March 2009. (acceptance ratio: 92/283)
62. Q. Guo, J. Vaidya and V. Atluri, "The Role Hierarchy Mining Problem: Discovery of Optimal Role Hierarchies, Annual Computer Security Applications Conference (ACSAC) December, 2008. (acceptance ratio: 42/173)
63. J. Vaidya, V. Atluri, Q. Guo and N. Adam, "Migrating to Optimal RBAC with Minimal Perturbation," ACM Symposium on Access Control Models and Technologies, June 2008. (acceptance ratio: 21/95)
64. H. Shin, V. Atluri and J. Vaidya, "A Profile Anonymization Model for Privacy in a Personalized Location Based Service Environment," International Conference on Mobile Data Management, April 2008. (Acceptance Ratio: 26/119)
65. H. Lu, J. Vaidya and V. Atluri "Optimal Boolean Matrix Decomposition: Application to Role Engineering," IEEE International Conference on Data Engineering, April 2008, (Acceptance ratio: 44/627).
66. V. Atluri and H. Shin, "Efficient Security Policy Enforcement in a Location Based Service Environment," *21st Annual IFIP WG 11.3 Conference on Data and Applications Security,* July, 2007.
67. J. Warner, V. Atluri, R. Mukkamala and J. Vaidya, "Using Semantics for Automatic Enforcement of Access Control Policies among Dynamic Coalitions," ACM Symposium on Access Control Models and Technologies, June, 2007. (Acceptance ratio: 25/82).
68. J. Vaidya, V. Atluri and Q. Guo, "The Role Mining Problem: Finding a Minimal Descriptive Set of Roles," ACM Symposium on Access Control Models and Technologies, June, 2007 (Acceptance ratio: 25/82).
69. D. Guo, H. Xiong, V. Atluri and N. Adam, "Semantic Feature Selection for Object Discovery in High-Resolution Remote Sensing Imagery," Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD), May 2007. (Acceptance Ratio: 34/730)
70. J. Vaidya, V. Atluri and J. Warner, "RoleMiner: Mining Roles using Subset Enumeration," 13th ACM Conference on Computer and Communication Security, October 2006, pages 144-153. (Acceptance ratio: 38/256)
71. S. Yu, V. Atluri, and N.R. Adam, "Preview: Optimizing View Materialization Cost in Spatial Data Warehouses," *8th International Conference on Data Warehousing and Knowledge Discovery* (DaWaK 2006) September, 2006, pages 45-54.

72. S. Yu, V. Atluri, and N.R. Adam, "Cascaded Star: an Efficient Hyper-dimensional Model for a Data Warehouse," *17th International Conference on Database and Expert Systems Applications* (DEXA), September, 2006, pages 439-448.

73. V. Atluri and H. Shin, "Efficient Enforcement of Security Policies based on Tracking of Mobile Users," *20th Annual IFIP WG 11.3 Conference on Data and Applications Security,* July, 2006.

74. R. Mukkamala, V. Atluri, J. Warner and R. Abbadasari "A Distributed Coalition Service Registry for Ad-hoc Dynamic Coalitions: A Service-oriented Approach," *20th Annual IFIP WG 11.3 Conference on Data and Applications Security,* July, 2006.

75. J. Warner and V. Atluri, "Inter-Instance Authorization Constraints for Secure Workflow Management," ACM Symposium on Access Control Models and Technologies, June, 2006, pages 190-199.

76. P. Liu, P. Mitra, C. Pan and V. Atluri, "Privacy-preserving Semantic Interoperation and Access Control of Heterogeneous Databases," *ACM Symposium on InformAtion, Computer and Communications Security*, March 2006, pages 66-77. (Acceptance Ratio: 32/186)

77. R. Mukkamala, V. Atluri and J. Warner, "A Distributed Service Registry for Resource Sharing among Ad-hoc Dynamic Coalitions," IFIP Joint Working Conference on Security Management, Integrity, and Internal Control in Information Systems, December 2005.

78. V. Janeja and V. Atluri, "FS^3 : A Random Walk based Free-Form Spatial Scan Statistic for Anomalous Window Detection," IEEE International Conference on Data Mining, November 2005, pages 661-664. (short paper, Acceptance ratio 72/561)

79. J. Warner, V. Atluri and R. Mukkamala, "An Attribute Graph Based Approach to Map Local Access Control Policies to Credential Based Access Control Policies," International Conference on Information Systems Security (ICISS 2005), December, 2005, 134-147.

80. V. Atluri and Q. Guo, "Unified Index for Mobile Object Data and Authorizations," *10th European Symposium on Research in Computer Security,* (ESORICS05) September, 2005, pages 80-97. (Acceptance ratio 26/158)

81. S. Yu, V. Atluri and N. R. Adam, "Selective View Materialization in a Spatial Data Warehouse," *7th International Conference on Data Warehousing and Knowledge Discovery* (DaWaK 2005), August 2005, pages 157-167.

82. J. Warner, V. Atluri and R. Mukkamala, "A Credential-based Approach for Facilitating Automatic Resource Sharing among Ad-hoc Dynamic Coalitions," *19th Annual IFIP WG 11.3 Conference on Data and Applications Security,* August, 2005, pages 252-266.

83. D. Guo, V. Atluri and N. Adam, "Texture-based Remote-sensing Image Segmentation," *IEEE International Conference on Multimedia & Expo*, July, 2005.

84. V. Atluri and J. Warner, "Supporting Conditional Delegation in Secure Workflow Management Systems," *ACM Symposium on Access Control Models and Technologies* (SACMAT), June 2005, pages 49-58. (Acceptance ratio: 19/90)

85. V. Janeja, V. Atluri, J. Vaidya and N. R. Adam, "Collusion Set Detection through Outlier Discovery," *IEEE International Conference on Intelligence and Security Informatics*, May 2005, pages 1-13.

86. V. Janeja, V. Atluri, A. Gomaa, N. Adam, C. Bornhoevd and T. Lin, "DM-AMS: Employing Data Mining Techniques for Alert Management," *Conference on Digital-Government*, May, 2005, pages 103-111.

87. V. Janeja and V. Atluri, "LS^3: A Linear Semantic Scan Statistic Technique for Detecting Anomalous Windows," *ACM Symposium on Applied Computing*, March, 2005, pages 493-497.

88. A. Gomaa, N. Adam and V. Atluri, "Color Time Petri Net For Interactive Adaptive Multimedia Objects," *11th International Multi-Media Modeling Conference* (MMM 2005), January 2005, pages 147-157.

89. V. Atluri and J. Warner, "Automatic Enforcement of Access Control Policies among Dynamic Coalitions," *International Conference on Distributed Computing & Internet Technology* (ICDCIT 2004), December 2004, pages 369-378. (Acceptance ratio: 51/211)
90. L. Qin and V. Atluri, "Ontology-guided Change Detection to the Semantic Web Data," *23rd International Conference on Conceptual Modeling* (ER2004), November, 2004, pages 624-638. (Acceptance ratio: 57/293)
91. V. Atluri and Q. Guo, "STAR-Tree: An Index Structure for Efficient Evaluation of Spatiotemporal Authorizations," *IFIP WG 11.3 Conference on Database and Applications Security*, July, 2004, pages 31-47.
92. V. Janeja, V. Atluri and N. Adam, "Detecting Anomalous Geospatial Trajectories through Spatial Characterization and Spatio-Semantic Associations," *Conference on Digital-Government*, May, 2004, pages 217-226.
93. N. R. Adam V. Janeja, and V. Atluri, "Neighborhood based detection of anomalies in high dimensional spatio-temporal Sensor Datasets," *ACM Symposium on Applied Computing*, March, 2004, pages 576-583.
94. V. Atluri, N.R. Adam and M. Youssef, "A Unified Index Scheme for Location Data and Mobile Customer Profiles," *Next Generation GeoSpatial Information*, (NG2I'03), A. A Balkema Publishers, The Netherlands, pages 97-106.
95. L. Qin and V. Atluri, "An Access Scheduling Tree to Achieve Optimal Freshness in Local Repositories," *4th International Conference on Electronic Commerce and Web Technologies* September, 2003, pages 227-236.
96. V. Atluri and S. Chun, "Handling Dynamic Changes in Decentralized Workflow Execution Environments," *14th International Conference on Database and Expert Systems Applications (DEXA)*, September, 2003, pages 813-825.
97. V. Atluri, E. Bertino, E. Ferrari and P. Mazzoleni, Supporting Delegation in Secure Workflow Management Systems, *IFIP WG 11.3 Conference on Data and Application Security*, August 2003, pages 190-202.
98. S. Chun and V. Atluri, "Ontology-based Workflow Change Management for Flexible eGovernment Service Delivery," *Conference on Digital-Government*, May, 2003, pages 131-134.
99. A. Paliwal, N. Adam, V. Atluri and Y. Yesha, "Electronic Negotiation of Government Contracts through Transducers," *Conference on Digital-Government*, May, 2003, pages 83-88.
100. V. Atluri, N.R. Adam, A. Gomaa and I. Adiwijaya, "Self-Manifestation of Composite Multimedia Objects to Satisfy Security Constraints," *ACM Symposium on Applied Computing*, March 2003, pages 927-934.
101. S. Chun, V. Atluri, N. R. Adam, "Domain Knowledge-based Automatic Workflow Generation," *13th International Conference on Database and Expert Systems Applications* (DEXA), September, 2002, pages 81-92.
102. V. Atluri and P. Mazzoleni, "Uniform Indexing for Geo-spatial Data and Authorizations," *16th IFIP WG11.3 Conference on Database Security*, July 2002, pages 207-218.
103. S. Chun, V. Atluri and N. R. Adam, "Dynamic Composition of Workflows for Customized Service Delivery," *Conference on Digital-Government*, May, 2002, pages 383-390.
104. V. Janeja, V. Atluri and N. R. Adam, "OUTLAW: Using Geo-Spatial Associations for Outlier Detection and Visual Analysis of Cargo Routes," *Conference on Digital-Government*, May, 2002, pages 123-126.
105. N. R. Adam, V. Atluri, S. Yu and Y. Yesha, "Efficient Storage and Management of Environmental Information," *19th IEEE Symposium on Mass Storage Systems*, April 2002, pages 165-179.

106. A. Gal, V. Atluri and G. Xu, "An Authorization System for Temporal Data," The 18th *IEEE International Conference on Data Engineering,* February, 2002, pages 339-340.

107. V. Atluri, S. Chun and P. Mazzoleni, "A Chinese Wall Security Model for Decentralized Workflow Systems," *8th ACM Conference on Computer and Communication Security*, November 2001, pages 48-57. (Acceptance ratio: 27/153)

108. R. Holowczak, S. Chun. F. Artigas and V. Atluri, "Customized Geospatial Workflows for E-Government Services," *9th ACM International Symposium on Advances in Geographical Information Systems* (ACM-GIS 2001), November 2001, pages 64-69.

109. V. Atluri and R. Mukkamala "An Extended Transaction Model Approach for Multilevel Secure Transaction Processing," *15th IFIP WG11.3 Conference on Database Security*, July 2001, pages 255-268.

110. J. Cranford, R. Mukkamala and V. Atluri, "Modeling and Evaluation of Distributed Workflow Algorithms", *Joint conference of the 5th World Multiconference on Systemics, Cybernetics and Informatics* (SCI 2001) July, 2001, pages 183-188.

111. N. Adam et al. "E-Government: Human-Centered Systems for Business Services," *Conference on Digital Government*. May, 2001, pages 48-55.

112. A. Gal and V. Atluri, An Authorization Model for Temporal Data, 7th ACM Conference on Computer and Communication Security, November 2000, pages 144-153. (Acceptance ratio: 28/131)

113. V. Atluri and R. Mukkamala, "Modeling and Evaluation of Redesigning Methodologies for Distributed Workflows," *ACM/IEEE International Symposium on Modeling, Analysis and Simulation of Computer and Telecommunication Systems*, August 2000, pages 248-255.

114. S. Chun and V. Atluri, Protecting Privacy from Continuous High-resolution Satellite Surveillance, *14th IFIP WG11.3 Conference on Database Security*, August 2000, pages 399-420.

115. V. Atluri, W-K. Huang and E. Bertino, "A Semantic Based Redesigning of Distributed Workflows," *9th International Conference on Management of Data*, December 1998, pages 328-345.

116. V. Atluri, "Modification of Integrity Constraints through Knowledge Discovery," *Second Annual IFIP WG 11.5 Working Conference on Integrity and Internal Control in Information Systems: Bridging Business Requirements and Research Results,* November 1998, pages 191-209.

117. W-K. Huang and V. Atluri, "Analyzing the Safety of Workflow Authorization Models," *Database Security, XII: Status and Prospects* Chapman & Hall, 1999, eds. Sushil Jajodia, pages 43-57.

118. N.R. Adam, I. Adiwijaya, V. Atluri and Y. Yesha, "EDI Through A Distributed Information Systems Approach," *Thirty-First Hawaii International Conference on System Sciences,* January 1998.

119. V. Atluri, W-K. Huang and E. Bertino, "An Execution Model for Multilevel Secure Workflows" August 1997, and *Database Security, XI: Status and Prospects* Chapman & Hall, 1998, eds. T.Y. Lin and Shelly Qian, pages 151-165.

120. V. Atluri, S. Jajodia, T.F. Keefe, C. McCollum, and R. Mukkamala, "Multilevel Secure Transaction Processing: Status and Prospects," position paper, *Database Security, X: Status and Prospects*, Chapman & Hall 1997, eds. Pierangela Samarati and Ravi Sandhu, pages 80 - 98.

121. V. Atluri and W-K. Huang, "An Authorization Model for Workflows," Proceedings of the *Fifth European Symposium on Research in Computer Security,* Rome, Italy, in Lecture Notes in Computer Science, No.1146, Springer-Verlag, September, 1996, pages 44-64.

122. N.R. Adam, V. Atluri and W-S. Li, "Toward High Performance Clinical Information Systems," Minitrack on Heterogeneous Database Interoperability, The *Second Annual Americas Conference on Information Systems,* August 1996, pages 689-691.

123. V. Atluri and W-K. Huang, "An Extended Petri Net Model for Supporting Workflows in a Multilevel Secure Environment," *Database Security, X: Status and Prospects* Chapman & Hall, 1997, eds. Pierangela Samarati and Ravi Sandhu, pages 240 - 257.

124. V. Atluri, "Multilevel Secure Transaction Processing in Advanced Database Applications," invited position paper, *10th IFIP Conference on Database Security,* July, 1996, pages 65.

125. V. Atluri, E. Bertino, and S. Jajodia, "Providing Different Degrees of Recency Options to Transactions in Multilevel Secure Databases," *Database Security, IX: Status and Prospects* Chapman & Hall, 1996, eds. D. Spooner, S. Demurijian and J. Dobson, pages 231-247.

126. V. Atluri, E. Bertino, and S. Jajodia, "Degrees of Isolation, Concurrency Control Protocols, and Commit Protocols," *Database Security, VIII: Status and Prospects* North Holland, 1995, eds. J. Biskup, M. Morgenstern and C. E. Landwehr, pages 259-274.

127. V. Atluri, E. Bertino, and S. Jajodia, "Achieving Stricter Correctness Requirements in Multilevel Secure Databases: The Dynamic Case," *Database Security, VII: Status and Prospects*, North Holland, 1994, eds. Thomas Keefe and Carl Landwehr, pages 135-158.

128. V. Atluri and S. Jajodia, "1SR-Consistency: A New Notion of Correctness for Multilevel Secure, Multiversion Database Management Systems," *Proc. XIX Latin American Informatics Conf.*, Buenos Aires, Argentina, August 1993, pages 195-214.

129. V. Atluri, E. Bertino, and S. Jajodia, "Achieving Stricter Correctness Requirements in Multilevel Secure Databases," *Proceedings of the IEEE Symposium on Research in Security and Privacy,* Oakland, CA, May 1993, pages 135-147. (Acceptance ratio: 17/70)

130. S. Jajodia and V. Atluri, "Alternative Correctness Criteria for Concurrent Execution of Transactions in Multilevel Secure Databases," *Proceedings of the IEEE Symposium on Research in Security and Privacy,* Oakland, CA, May 4-6, 1992, pages 216-224. (Acceptance ratio: 21/89)

Refereed Workshop Publications:

1. B. Shafiq, J. Vaidya, S. Chun, V. Atluri, N. Adam, A. Lieb, "Ontology Driven Resource Management for Emergency Response," Secure Knowledge Management Workshop, November 2008.
2. A. Gomaa, N. Adam and V. Atluri, "Adapting Spatial Constraints of Composite Multimedia Objects to achieve Universal Access," *IEEE International Workshop on Multimedia Systems and Networking* (WMSN05), held in conjunction with the *24th IEEE International Performance, Computing, and Communications Conference* (IPCCC), Phoenix, Arizona, USA, April 2005, pages 519-525.
3. D. Kim, I. Im, N. Adam, V. Atluri, M. Bieber and Y. Yesha, "A Clickstream-Based Collaborative Filtering Personalization Model: Towards A Better Performance," *6th ACM International Workshop on Web Information and Data Management* (WIDM 2004), November, 2004, pages 88-95.
4. S. Chun, V. Atluri and N.R. Adam, "Policy-based Web Service Composition," *The 14th International Workshop on Research Issues on Data Engineering: Digital Government Services* (RIDE-DGS'2004), March, 2004.
5. L. Qin and V. Atluri, "Concept-level Access Control for the Semantic Web," *ACM Workshop on XML Security*, held in conjunction with the *10th ACM Conference on Computer and Communications Security*, October 2003, pages 94-103.
6. C. Ghirardini, S. Chun, V. Atluri, I. Kamel and N. Adam "A Study on the Indexing of Satellite Images at NASA Regional Application Center," a special track on *Image-Based Geospatial Databases* at 5th International Workshop on Query Processing and Multimedia Issues in Distributed Systems (QPMIDS'2001), September 2001, pages 859-864.
7. W-K. Huang and V. Atluri, "SecureFlow: A Secure Web-enabled Workflow Management System," *4th ACM Workshop on Role-based Access Control,* October, 1999, pages 83-94.
8. E. Bertino, E. Ferrari and V. Atluri, "A Flexible Model Supporting the Specification and Enforcement of Role-based Authorizations in Workflow Management Systems," *2nd ACM Workshop on Role-based Access Control,* November 1997, pages 1-12.

9. N.R. Adam, V. Atluri and K.R. McKeown, "Clinical Information Systems: Making Use of Research in Digital Libraries," Invited White Paper, The NSF Workshop on Research & Development Opportunities in Federal Information Services, May 1997.

Refereed Abstracts/Posters:

1. M. Gautam, S. Jha, S. Sural, J. Vaidya and V. Atluri, "Poster: Constrained Policy Mining in Attribute Based Access Control," ACM Symposium on Access Control Models and Technologies, June, 2017 (poster).
2. H. Shin, J. Vaidya and V. Atluri, "Optimal Trajectory Partitioning Methods for Privacy in Continuous Location Based Services," International Conference on Mobile Data Management, 2010, poster paper.
3. H. Shin, J. Vaidya, V. Atluri and S. Choi, "Optimal Trajectory Partitioning for Enhanced Privacy and Utility in Continuous Location Based Services," ACM Conference on Computer and Communications Security, November 2009. (Poster)
4. N. Adam, V. Atluri, S. Chun, J. Ellenberger, B. Shafiq, J. Vaidya and H. Xiong, "Secure Information Sharing and Analysis for Effective Emergency Management," 9th Annual International Conference on Digital Government Research, May 2008.
5. S. Chun, N.R. Adam and V. Atluri, "MENVIS: Mobile Environmental Information System," 8th Annual International Conference on Digital Government Research, May 2007.
6. N. R. Adam, V. Atluri, S. Chun, P. Fariselli, J. Culver-Hopper, O. Bojic, R. T. Stewart, J. Fruscione and N. Mannochio, "Technology transfer of inter-agency government services and their transnational feasibility studies," *Conference on Digital Government,* May 2005, pages 225-226.
7. N. R. Adam, V. Atluri, R. Koslowski, V. Janeja, J. Warner and A. Paliwal, "Agency interoperation for effective data mining in border control and homeland security applications," *Conference on Digital Government*, May 2005, pages 285-286.
8. N. Adam, V. Atluri, V. Janeja, J. Vaidya, M. Youssef., "Semantic Graph based Knowledge Discovery from Heterogeneous Information Sources," *Inaugural conference on Working Together: Research & Development Partnerships in Homeland Security*, Department of Homeland Security Science & Technology, April, 2005.
9. N. Adam, V. Atluri, S. Chun, A. Gomaa, A. Paliwal, J. Vaidya, M. Youssef, A. Suenbuel, C. Bornhoevd, S. Raiyani, T. Lin, J. Cooper and J. Paczkowski, "Semantic-based Incident Management System," *Inaugural conference on Working Together: Research & Development Partnerships in Homeland Security,* Department of Homeland Security Science & Technology, April, 2005.
10. N. R. Adam, F. Artigas, V. Atluri, S. Chun and E. Konsevick, "Geospatial Tool for Managing the Ecological Risk of the Contaminated Wetlands Sediments," *Coastal GeoTools '05*, pages 44-45, March, 2005.
11. N. R. Adam, V. Atluri and S. Chun, "GIS and Mobility Support for New Jersey Watershed Volunteer Monitoring Network," *Coastal GeoTools '05*, pages 37-38, March, 2005.
12. N. R. Adam, V. Atluri and Janeja, "Agency interoperation for effective data mining in border control and homeland security applications," *Conference on Digital Government*, May 2004, pages 375-376.
13. N. Adam, F. Artigas, V. Atluri, I. Bora, R. Ceberio, S. Chun and A. Paliwal, "Spatially Integrated Coastal Permitting System (SICOP)," *Costal Zone 03 conference*, July, 2003.
14. N. Adam, F. Artigas, V. Atluri, S. Chun and P. Mazzoleni, "Customized Visualization of GeoSpatial Government Regulations," *Conference on Digital-Government*, May, 2002, pages 457.

Miscellaneous Technical Publications:

1. Security, Privacy and Trust for Responsible Innovations and Governance, Vijay Atluri, Yuan Hong, Soon Ae Chun, Tutorial, International Conference on Digital Government Research, June, 2020, pp 365-366.
2. I. Molloy, M. Tripunitara, V. Lotz, M. Kuhlmann, C. Schaufler and V. Atluri, "Panel on granularity in access control," *ACM Symposium on Access Control Models and Technologies* (SACMAT), June 2013, pages: 85-86.
3. V. Atluri, Guest Editors' Introduction to the Special Issue on Data and Application Security, Journal of Computer Security, Volume 19, Number 3, 2011.
4. V. Atluri and C. Diaz, Program Chair's message, *16th European Symposium on Research in Computer Security*, 2011.
5. V. Atluri, Program Chair's message, *22nd Annual IFIP WG 11.3 Conference on Data and Applications Security,* July, 2008.
6. V. Atluri, Panel on role engineering, *ACM Symposium on Access Control Models and Technologies* (SACMAT), June 2008, pages 61-62.
7. D. Ferraiolo and V. Atluri, A meta model for access control: why is it needed and is it even possible to achieve? *ACM Symposium on Access Control Models and Technologies* (SACMAT), June 2008, pages 153-154.
8. A. Bagchi and V. Atluri, Program Chairs' message, 2nd International Conference on Information Systems Security, 2006.
9. V. Atluri, Guest Editor's Introduction to the Special Issue on Computer and Communications Security, ACM Transactions on Information Systems Security, Volume 4, Number 3, August 2005.
10. V. Atluri and I. Ray, Guest Editor's Introduction to the Special Issue on Security, International Journal on Digital Libraries, Volume 4, Number 3, pages 137-138, 2004.
11. V. Atluri, General Chair's message, 11th ACM Proceedings on Computer and Communications Security, 2004.
12. V. Atluri, Program Chair's message, 10th ACM Proceedings on Computer and Communications Security, 2003.
13. V. Atluri, A. Joshi and Y. Yesha Guest Editor's Introduction to the Special Issue on Semantic Web, VLDB Journal, Volume 12, Number 4, 2003
14. V. Atluri, Guest Editor's Introduction to the Special Issue on Role-based Access Control, ACM Transactions on Information Systems Security, Volume 4, Number 3, August 2001.
15. V. Atluri and J. Hale, Guest Editors' Introduction to the Special Issue on Database Security, Journal of Computer Security, Volume 4, Number 3, August 2001.
16. V. Atluri and J. Hale, Preface to the Research Advances in Database and Information Systems Security, Kluwer Academic Publishers, 2000.
17. V. Atluri and P. Samarati, Guest Editors' Introduction to the Special Issue on Security of Data and Transaction Processing, Distributed and Parallel Databases: An International Journal, Vol.8, No.1, January 2000, 145 pages 1-2.
18. V. Atluri and D. L. Spooner: Workshop Summary. *Database Security, XII: Status and Prospects* Chapman & Hall, 1999, eds. Sushil Jajodia, pages 287-293.
19. V. Atluri, "Supporting Workflow, Long Duration and Nested Transaction Models in a Multilevel Secure Database Environment," *Information and Data Management: Research Agenda for the* 21^{st} *Century*, Workshop Proceedings, March 1998.
20. V. Atluri, "Incorporating Security into Workflow Management Systems," Invited paper, 1998 NSF Design & Manufacturing Grantees Conference, January 1998.

Technical Reports:

1. N.R. Adam, V. Atluri, and W-S. Li, "A Multi-layered Clinical Information System for Efficient Analysis and Retrieval," CIMIC Technical Report, 1996.

PROFESSIONAL ACTIVITIES:

- *Vice-Chair*, ACM SIGSAC (Special Interest Group in Security, Audit, and Control), Elected, July 2009 - June 2013.
- *Secretary/Treasurer*, ACM SIGSAC (Special Interest Group in Security, Audit, and Control), Elected, July 2005 - June 2009.
- Chair, IFIP WG11.3 on Data and Application Security and Privacy (July 2008 - 2014)
- *Steering Committee Member*
  - ACM SIGSAC (Special Interest Group in Security, Audit, and Control), 2001 - 2009
  - ACM Symposium on Access Control Models and Technologies (SACMAT), 2001 - 2008
  - International Conference on Information Systems Security, 2007 - 2008
  - Annual Conference on Privacy, Security and Trust (PST 2006,2008,2011)
  - Workshop on Advanced Technologies in Real-Time Monitoring and Modeling for Drinking Water Safety and Security, June 2002, and December 2002, Rutgers University
  - Science on the Semantic Web (SWS) Workshop: Building the Next Generation of Environmental Information Systems, Oct 24 and 25, 2002, Rutgers University
- *Member*, SIGSAC Awards Committee, 2009
- *Editorial Board*
  - ACM Computing Surveys (CSUR) (2014-)
  - Journal of Computer Security, IOS Press (2009-2021)
  - International Journal of Information Security (IJIS) (2020 -)
  - Digital Government: Research and Practice (2020 -)
  - International Journal on Digital Libraries, Springer (JDL) (2004 -)
  - IEEE Transactions on Dependable and Secure Computing (TDSC) (2011 - 2015)
  - International Journal of Information and Computer Security, Inder science (IJICS)(2004 - 2017)
  - Computers & Security, Elsevier (2008-2010)
  - IEEE Transactions on Knowledge and Data Engineering (TKDE) (2005 - 2009)
  - International Journal of E-Business Research, IGI Global (IJEBR) (2004 - 2008)
  - ACM SIGMOD DiSC (Digital Symposium Collection) (2002 - 2005)
- *Editor, Special Issue*
  - Journal of Computer Security, Special Issue on Data and Applications Security, 2011.
  - ACM Transactions on Information Systems Security, Special Issue on Computer and Communications Security, 2005.
  - Journal on Digital Libraries (JDL), Special Issue on Security (with Indrakshi Ray), 2004
  - The Very Large Databases (VLDB) Journal, Special Issue on the Semantic Web (with Anupam Joshi and Yelena Yesha), 2003.
  - ACM Transactions on Information Systems Security, Special Issue on Role-Based Access Control, 2001
  - Journal of Computer Security, Special Issue on Database Security, 2000 (with John Hale)
  - Distributed and Parallel Databases: An International Journal, Special Issue on Security of Data and Transaction Processing, Vol.8, No.1, January 2000 (with Pierangela Samarati)

  - Area editor in Geo-security, Encyclopedia of Geographic Information Science, Springer, 2007.

- *General Chair*
  - ACM Symposium on Access Control Models and Technologies (SACMAT), 2012 (with Jaideep Vaidya)
  - 11th and 12th ACM Conference on Computer and Communications Security, 2004 and 2005.
  - Web Information Systems Engineering (WISE) 2005 (with Dimitrios Georgakopoulos)

- *General Vice-Chair*
  - IEEE International Conference on Data Engineering, 2012

- *Program Chair*
  - 27th European Symposium on Research in Computer Security (ESORICS) 2022 (with Roberto Di Pietro)
  - 28th IFIP Conference on Data and Application Security and Privacy, 2014 (with Guenther Pernul).
  - European Symposium on Research in Computer Security (ESORICS) 2011 (with Claudia Diaz)
  - International Conference of Digital Government Research, 2010 (with Soon Chun, Luis F. Luna Reyes)
  - 22nd IFIP Conference on Data and Application Security, 2008
  - 2nd International Conference on Information Systems Security (ICISS 2006) (with Aditya Bagchi)
  - 10th ACM Conference on Computer and Communications Security, 2003.
  - 5th ACM Workshop on Role-based Access Control, 2000
  - 13th IFIP Working Conference on Database Security, 1999 (with John Hale)

- *Organization Committee Chair* ACM SIGMOD/PODS 2005 (with Anupam Joshi)
- *Workshops Chair* 14th ACM Conference on Computer and Communications Security, 2007, 2008, 2009
- *Tutorial and Panel Co-chair* 2009 IEEE International Conference on Privacy, Security, Risk and Trust (PASSAT-09)
- *Awards committee member*, Award for Outstanding Research in Privacy Enhancing Technologies, 2014
- *Panel Leader*, Panel on Role Engineering, ACM Symposium on Access Control Models and Technologies, June 2008
- *Panel Leader*, Panel on Data Aggregation, Data Mining and Privacy, NSF Cyber Trust PI Conference, August 2004.
- *Panelist* in the panel discussion on
  - "Directions for data and applications security," in the 23rd IFIP Working Conference on Database Security, 2009.
  - "Access Control for Assured Information Sharing," ACM Symposium on Access Control Models and Technologies, June 2007.
  - "E-commerce Security," International Symposium on Distributed Autonomous Systems, March 2001
  - "Role-Based Access Control in Workflow Systems" in the 5th ACM Workshop on Role-based Access Control, 2000
  - "Directions for Securer Data and Applications Security," in the 14th IFIP Working Conference on Database Security, 2000

- "Multilevel Secure Transaction Processing: Is it Well-understood?" in the 10th IFIP Working Conference on Database Security, 1996

- *Program Committee Member*
  - ACM Conference on Data and Application Security and Privacy (CODASPY), 2012, 2018, 2019, 2020, 2021, 2022
  - ACM Symposium on Access Control Models and Technologies (SACMAT), 2001, 2002, 2003, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2017, 2019, 2022
  - IFIP WG 11.3 Conference on Database and Applications Security and Privacy, 2003, 2004, 2005, 2006, 2007, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022
  - IFIP International Information Security Conference, 2003, 2008, 2009, 2010, 2011, 2012, 2014, 2015, 2016, 2017, 2018, 2020, 2021
  - European Symposium on Research in Computer Security (ESORICS) 2004, 2005, 2007, 2008, 2014, 2015, 2018, 2019, 2020, 2021
  - International Conference on Information Systems Security (ICISS) 2005, 2007, 2008, 2009, 2011, 2013, 2014, 2015, 2016, 2017, 2018, 2020, 2022
  - International Conference of Digital Government Research, 2008, 2009, 2010, 2017, 2018, 2019, 2020, 2021, 2022
  - 30th ACM International Conference on Advances in Geographic Information Systems, 2022
  - Workshop on Cloud Security and Privacy (WPES) 2019
  - IEEE International Conference on Information Reuse and Integration for Data Science (IRI) 2019
  - International Conference of the Florida Artificial Intelligence Research Society (FLAIRS) 2020, 2021, 2022
  - 39th IEEE International Conference on Distributed Computing Systems (ICDCS 2019) Cloud Computing Track
  - Workshop on Big Data for Cybersecurity (BigCyber 2018)
  - Sixth International Conference on eDemocracy & eGovernment (ICEDEG) 2019, 2020, 2021
  - Cloud and Trusted Computing 2015, International Symposium on Secure Virtual Infrastructure (C&TC 2015)
  - International Conference on Applied Cryptography and Network Security (ACNS 2012)
  - International Conference on Network and System Security (NSS 2011)
  - Annual Conference on Privacy, Security and Trust (PST) 2017
  - ACM Symposium on Information, Computer and Communications Security (AsiaCCS), 2006, 2007, 2009, 2010, 2011
  - IEEE-AESS Conference in Europe about Space and Satellite Communications (ESTEL), special track on security and privacy, 2012
  - International Conference on Mobile Web Information Systems (MobiWIS), 2011
  - Special Track of SDPS 2011: Secure Collaboration in Global Design and Supply Chain Management, 2011.
  - ACM Conference on Computer and Communications Security, 2001, 2002, 2006, 2007, 2008
  - International Conference on Distributed Computing Systems (ICDCS), 2010
  - IEEE International Symposium on Trust, Security and Privacy for Emerging Applications (TSP 2010)
  - Annual Computer Security Applications Conference (ACSAC), 2008, 2009, 2010, 2011
  - International Conference on Information and Knowledge Management (CIKM) 2010
  - International Symposium on Information Security (IS) 2008,2009,2010

- IEEE International Conference on Web Services (ICWS) 2010
- Workshop in Information Security Theory and Practice (WISTP 2011)
- Workshop on Specification and Implementation of Dynamic Security Policies, 2010
- International Conference on Advanced Information Networking and Applications (AINA), 2009
- IEEE International Conference on Privacy, Security, Risk and Trust (PASSAT), 2009, 2010
- IEEE/IFIP International Conference on Embedded and Ubiquitous Computing (EUC 2009)
- ACM Workshop on Information Security Governance (WISG'09)
- ACM Workshop on Privacy in the Electronic Society (WPES) 2009, 2016, 2018, 2019
- International Conference on Database Systems for Advanced Applications (DASFAA), 2006, 2007, 2008
- Fourth International Conference on Information Security and Cryptology (Inscrypt 2008)
- IEEE International Conferences on Intelligence and Security Informatics (ISI), 2007, 2008, 2011.
- International Conference on Trust, Privacy and Security in Digital Business 2008, 2009, 2010 (TrustBus)
- International Conference on Security and Cryptography (SECRYPT) 2010
- 10th IEEE International Conference on Multimedia (ISM), 2008
- IEEE/IFIP International Symposium on Trust, Security and Privacy for Pervasive Applications (TSP 2008, 2009)
- The Secure Knowledge Management Workshop (SKM) 2006, 2008, 2010
- The Joint Conference of the 9th Asia-Pacific Web Conference and the 8th International Conference on Web-Age Information Management, 2007
- First International Workshop on Privacy-Aware Location-based Mobile Services (PALMS 07)
- Third International Workshop on Information Assurance (WIA-2007)
- International Workshop on Security and Trust Management (STM), 2007, 2008, 2009
- International ICST Conference on Security and Privacy in Communication Networks, 2010 (SecureComm)
- 1st ACM Workshop on Information and Communications Security Standards and Regulations (StaR_SEC 2007)
- "Multimedia Security" track of the IEEE International Symposium on Multimedia (ISM2007)
- Information Security Conference (ISC), 2006
- Eighth International Conference on Information and Communications Security (ICICS 2006,2007,2008)
- Workshop on Trusted Collaboration 2006 (TrustCol-2006)
- IEEE International Conference on Data Engineering (ICDE 2004, 2008)
- IEEE International Conference on Information Reuse and Integration, 2006, 2007, 2008,2010 (IEEE-IRI)
- International Workshop on Security, Privacy and Trust in Pervasive and Ubiquitous Computing, 2006, 2007 (SecPerU)
- International Conference on Emerging Trends in Information and Communication Security (ETRICS), 2006
- ACM Symposium on Applied Computing, Datamining Track, 2006, 2007, 2008, 2009.
- International Workshop on Privacy in Location-Based Applications (PiLBA 08)
- 3rd International Conference on Business Process Management (BPM05)
- Semantic Web and Policy Workshop, 2005
- Workshop on Policy Management for the Web, 2005
- 2nd International Workshop P2P Data Management, Security and Trust (PDMST'05)
- Third Workshop on Security in Information Systems, 2005

  - IASTED International Conference on Databases and Applications (DBA) 2005, 2006
  - 2005 IRMA international conference, San Diego, May 2005.
  - The Fifth International Workshop on Multimedia Data Mining (MDM/KDD2004)
  - The 14th International Workshop on Research Issues on Data Engineering: Digital Government Services (RIDE-DGS'2004)
  - The International Conference on Distributed Computing and Internet Technology (Systems Security Track), 2004
  - The Workshop on Geographic and Biological Data Management, to be held in conjunction with COMPSAC'04
  - Next Generation Information Technologies and Systems (NGITS'2002)
  - The Third International Symposium on Electronic Commerce (ISEC-02)
  - The Second International Conference on Web-Age Information Management (WAIM'01), 2001, 2007
  - 20th International Conference on Conceptual Modeling (ER2001)
  - 2001 International Workshop on Data Semantics in Web Information Systems (DASWIS-2001)
  - IEEE Conference on Advances in Digital Libraries, 1999, 2000
  - HICSS33: Minitrack on Evolution of Business to Business Electronic Commerce, 2000
  - 3rd and 4th ACM Workshop on Role-based Access Control, 1998, 1999

- *Treasurer*, ACM Symposium on Access Control Models and Technologies (SACMAT), 2009
- *Session Chair* at many conferences including ACM CCS, DBSEC, ACM SACMAT, ICISS, ESORICS, DGO, ADL, ICDE.
- *Proceedings Chair*
  - 9th ACM Conference on Computer and Communications Security, 2002.
  - 3rd and 4th ACM Workshop on Role-based Access Control, 1998 and 1999
- *Registration Chair*, The Fourteenth IEEE International Conference on Data Engineering, 1998
- *Publicity Chair*
  - The Secure Knowledge Management Workshop (SKM) 2010
  - ACM Symposium on Access Control Models and Technologies (SACMAT), 2006
  - 7th ACM Conference on Computer and Communications Security, 2000
  - IEEE Conference on Advances in Digital Libraries, 1998
- *Publicity Co-Chair,* International Workshop on Advanced Transaction Models and Architectures, August, 1996 held in conjunction with VLDB'96 Conference
- *Proposal Reviewer*
  - National Science Foundation: Information and Data Management, Trusted Computing, Small Business Innovative Research, Biodiversity and Ecosystems Informatics, and International programs
  - Natural Sciences and Engineering Research Council
  - Council for International Exchange of Scholars - The Fulbright Program for Faculty and Professionals
  - FWF Austrian Science Fund
- *SIGSAC Volunteer* for the ACM's Career Resource Centre for the Special Interest Group in Security, Audit, and Control

- *Referee for numerous journals and conferences*

  Journals and Books:
  ACM Transactions on Database Systems, IEEE Transactions on Knowledge and Data Engineering, IEEE Transactions on Computers, IEEE Transactions on Dependable and Secure Computing, IEEE Transactions on Parallel and Distributed Systems, IEEE Transaction on Systems, Man and Cybernetics, IEEE Computer, IEEE Internet Computing, ACM Transactions on Information Systems Security (TISSEC), ACM Transactions on Information Systems (TOIS), ACM Computing Surveys, Information Systems, Kluwer Academic Publishers, Journal of Computer Security, Distributed and Parallel Databases, Journal of Intelligent Information Systems, International Journal of Cooperative Information Systems, SIGMOD Record, Data and Knowledge Engineering Journal, Decision Support Systems, International Journal of Information Security, Theory and Practice of Object Systems, Journal of Digital Libraries, The Computer Journal, Computing Systems Journal, International Journal of Semantic Web and Information Systems, Journal of Systems Architecture, Information & Software Technology, International Journal of Foundations of Computer Science, Journal of Database Management, Information Processing Letters, Theoretical Computer Science, The VLDB Journal, Information Sciences, Journal of Network and Systems Management, ACM Journal of Educational Resources in Computing, International Journal of Advanced Manufacturing Technology, International Journal of Information and Computer Security, IEEE Transactions on Software Engineering (TSE), IEEE Transactions on Services Computing, Knowledge and Information Systems, Information Systems Frontiers, ACM Transactions on Internet Technology

  Conferences: All the conferences serving as the program committee member.

Keynote/Plenary Scholarly Presentations (Selected):

1. Attribute Based Access Control Paradigm: Challenges and Solutions, International Day for Women in Science and Technology, February 2022.
2. Data Security and Privacy, Bhartiya Vaigyanik (Vaibhav) Summit, Global Summit of Indian Overseas Researchers and Academicians, October 2020.
3. Security, Privacy and Trust for Responsible Innovations and Governance, Vijay Atluri, Yuan Hong, Soon Ae Chun, Tutorial, International Conference on Digital Government Research, June, 2020.
4. "Big Data: Security and Privacy Challenges," Women in Data Science (WiDS) Conference, February 2016.
5. "The Role Mining Problem - Variants and Extensions," University of Melbourne, September 2014.
6. "The Role Mining Problem: A Formal Perspective," University of Illinois at Urbana-Champaign, September 2011.
7. "The Role Mining Problem: A Formal Perspective," Mathematics and Computer Science Department, Emory University, April 2009.
8. "The Role Mining Problem: A Formal Perspective," Indian Institute of Technology, Kharagpur, India, October 2008.
9. "The Role Mining Problem: A Formal Perspective," International Institute of Information Technology, Hyderabad, India, October 2008.
10. "Privacy Challenges in Customized Location Based Services," Security and Privacy Day, May 30, 2008.
11. "Security and Privacy Challenges in Location Based Service Environments," The Third International Conference on Availability, Reliability and Security, Barcelona, Spain, March 2008, Invited Keynote Talk.
12. "Efficient Enforcement of Authorizations in Geospatial Databases," College of Computing, Georgia Tech, April, 2006.

13. “Unified Indexing of Spatio-temporal Data and Authorizations,” Computer Science Department, Polytechnic University, April, 2004.
14. “Access Control for Spatio-temporal Databases,” Department of Information Science & Telecommunications, University of Pittsburgh, April, 2004.
15. “Unified Indexing of Spatio-temporal Data and Authorizations,” Computer Science Department, New Jersey Institute of Technology, March, 2004.
16. “Security Challenges in an Electronic Commerce Environment,” International Institute of Information Technology, Hyderabad, India, December 2003.
17. “Access Control for Spatial Databases,” Computer Science and Engineering Colloquium, Pennsylvania State University, University Park, November 2003.
18. “A Content-based Authorization Model for Digital Libraries,” Computer Science Department, SUNY Buffalo, October, 2001.
19. “E-government for State Business Services,” Office of Information Technology, State of New Jersey, October, 2001
20. “Secure Agency Interoperation for Effective Data Mining in Container Security Applications,” The European Workshop Exploring R&D Supporting Container Security, Hamburg October, 2003.
21. “Secure Agency Interoperation for Effective Data Mining in Border Control and Homeland Security Applications,” IBM Global Services, Reston, VA, October, 2002.
22. “Secure Agency Interoperation for Effective Data Mining in Border Control and Homeland Security Applications,” SAP Research Labs, Palo Alto, CA, July 2002.
23. “Border Control Challenges: Secure Agency Interoperation for effective data mining,” SAP Public Services, Washington, DC June, 2002.
24. “Building E-government Services with the State of New Jersey,” NSF Conference on Digital-Government, May, 2002.
25. “Continuous High-resolution Satellite Surveillance: Privacy Concerns,” Workshop on Global Public-Private Partnerships in a Networked World, Rutgers University, March 8, 2002.
26. “E-Government: Human-Centered Systems for Business Services,” NSF Workshop on Digital-Government. May, 2001.
27. “E-government for State Business Services,” NSF Site Visit, Rutgers University, May 2001.
28. “Digital Libraries Research at CIMIC” School of Information and Library Studies (SCILS), Rutgers University, October 2000.
29. “E-government Project for State Business Services” Workshop on EGOV, Rutgers University, March 2000.
30. “Procuring Grants: Some Guidelines,” Orientation for New Faculty, FoM, Rutgers University, September 1999, 2000, 2001.
31. “Digital Libraries: Multimedia Distribution” Panasonic Information and Networking Technologies Laboratory, Princeton, NJ, March 1999.
32. “Change Detection in Data Warehouses” IBM Watson Research Center, October 1997
33. “DigiTerra: An Environmental Decision Support System,” David Sarnoff Research Center, Princeton, NJ, September 1997.
34. “Secure Concurrency Control,” Naval Research Laboratory, Washington, D.C., November 1992.

DOCTORAL THESIS SUPERVISION:

Primary Adviser:

1. Wei-Kuang Huang, Rutgers University, graduated in May, 1998, Associate Professor, Department of Operations and Information Management, University of Connecticut.
   Dissertation: Incorporating Security into Workflow Management Systems (Co-Adviser: N. Adam)
2. Soon Ae Chun, Rutgers University, May 2003, Professor, Information Systems, City University of New York
   Dissertation: Decentralized Management of Dynamic and Distributed Workflows (Co-Adviser: N. Adam)
3. Li Qin, Rutgers University, May 2005, Professor and Chair, Department of Marketing, Information Systems, and Decision Sciences, Fairleigh Dickinson University
   Dissertation: Change Detection and Management for the Semantic Web
4. Songmei Yu, Rutgers University, May 2006, Associate Professor, Computer Science Department, Felician University
   Dissertation: Efficient Data Management in Spatial Data Warehouses (Co-Adviser: N. Adam)
5. Vandana Janeja, Rutgers University, May 2007, Professor and Chair, Department of Information Systems, University of Maryland, Baltimore County
   Dissertation: Inter-domain Anomaly Detection in Highdimensional Datasets (Co-Adviser: N. Adam)
6. Janice Warner, Rutgers University, May 2007, Provost and Professor, Georgian Court University
   Dissertation: Secure Resource Sharing in Dynamic Ad-hoc Collaborations
7. Qi Guo, Rutgers University, June 2010
   Dissertation: The Role Mining Problem: A Formal Approach (Co-Adviser: J. Vaidya)
8. Heechang Shin, Rutgers University, August 2010, Associate Professor and Chair, Department of Information Systems and Business Analytics, Iona College
   Dissertation: Ensuring Security and Privacy in Personalized Mobile Environments (Co-Adviser: J. Vaidya)
9. Haibing Lu, Rutgers University, May 2011, Associate Professor and Chair, Department of Operations Management and Information Systems, School of Business, Santa Clara University
   Dissertation: Boolean Matrix Decomposition and Extension with Applications (Co-Adviser: J. Vaidya)
10. Emre Uzun, Rutgers University, July 2015, Bilkent University, Turkey
    Dissertation: Formal Security Analysis of Access Control Models and their Spatiotemporal Extensions (Co-Adviser: J. Vaidya)
11. Nazia Badar, Rutgers University, October 2016
    Dissertation: Towards Automatic Configuration of Access Control, (Co-Adviser: J. Vaidya)
12. Ussama Yaqub, Rutgers University, July 2018, Assistant Professor Suleman Dawood School of Business, Lahore University of Management Sciences (LUMS), Pakistan
    Dissertation: Stakeholder Theoretic Sentiment based Analysis of Citizen Interactions using Social Media, (Co-Adviser: J. Vaidya)
13. Gunjan Batra, Rutgers University, October 2021, Assistant Professor, Department of Information Systems and Security, Kennesaw State University
    Dissertation: Policy Configuration and Management in ffAttribute Based Access Control, (Co-Adviser: J. Vaidya)

Co-Adviser:

1. Igg Adiwijaya, Rutgers University, graduated in May, 2000, AdvanTechnologies Inc.
   Dissertation: Detecting Changes to Data and Schema in Semi-structured Documents (Primary Ad-

viser: N. Adam)

2. June-Suh Cho, Rutgers University, December 2001, Hankuk University of Foreign Studies, South Korea
   Dissertation: Recognition of Partially Occluded Objects in Content-based Image Retrieval (Primary Adviser: N. Adam)
3. Mahamoud Youseff Mohamed, Rutgers University, May 2005, Arab Academy for Science & Technology Egypt
   Dissertation: Semantically Enhanced and Efficient Location Services for Preserving Mobile Consumer's Privacy (Primary Adviser: N. Adam)
4. Ahmed Gomaa, Rutgers University, May 2006, Associate Professor of operations and information management, University of Scranton
   Dissertation: Self-manifestation of composite multimedia objects to achieve Universal access (Primary Adviser: N. Adam)
5. Dihua Guo, Rutgers University, October 2006, Johnson & Johnson
   Dissertation: Semantic-based High Resolution Remote Sensing Image Retrieval (Primary Adviser: N. Adam)
6. Sadhana Jha, Security Analysis of Attribute Based Access Control Systems, May 2018, Assistant Professor, BITS Pilani, India
   Indian Institute of Technology, Kharagpur, India, (Primary Adviser: Shamik Sural)

Member of Dissertation Committee:

1. Richard Holowczak, Rutgers University, 1997, Currently assistant professor, Department of Statistics and CIS, Baruch College, City University of New York.
   Dissertation: Extractors for Digital Library Objects
2. Binto George, Indian Institute of Science, Bangalore, India, December 1998, currently assistant professor, Department of Computer Science, Western Illinois University.
   Dissertation: Secure Real-time Transaction Processing
3. Dong-Ho Kim, Rutgers University, May 2005
   Dissertation: A Learning-Based Model In Clickstream-based Collaborative Filtering
4. Francis Mendez, Rutgers University, July 2005
   Dissertation: Using Discrete Multivariate MCMC Bayesian Methods for Change Detection and Disclosure Control
5. External Supervisor, Elena Ferrari, University of Milan, Italy, May 1998, Currently professor, Department of Computer Science, University of Milan, Italy.
   Dissertation: Temporal Authorization Models
6. External Supervisor, Sabrina De Capitani di Vimercati , University of Milan, Italy, January 2001, Currently associate professor, Department of Electronics for Automation, University of Brescia, Italy.
   Dissertation: Protecting Information in the Global Infrastructure
7. External Examiner, Frans A. Lategan, August 2002, Rand Afrikans University, South Africa.
   Dissertation: Enforcing Privacy on the Internet
8. External Reader, Li Zhang, August 2004, SUNY Buffalo
   Dissertation: VizStruct: Visual Exploration for Gene Expression Profiling
9. External Examiner, Sergio Mascetti, University of Milan, December 2007
   Dissertation: Privacy Protection through Anonymity in Location-based Services
10. Mudhakar Srivatsa, College of Computing, Georgia Tech, May 2007
    Dissertation: Security Architectures and Algorithms for Overlay Network Services

11. Aabhas Paliwal, Rutgers University, May 2007
    Dissertation: Semantic based Discovery of Web Services and Orchestration of Web Service Process
12. Wugang Xu, New Jersey Institute of Technology, June 2007
    Dissertation: Automatic Physical Database Design: Recommending Indexes and Materialized Views
13. External Examiner, Sara Foresti, University of Milan, May 2009
    Dissertation:Preserving privacy in data outsourcing
14. External Examiner, He Wang, The University of Western Ontario, December 2008
    Dissertation: Fine-grained Role Graph Model
15. Srikanth Vemuru, Acharya Nagarjuna University, India, 2011
    Dissertation: A Novel Cross Layer Approach for Event Critical Applications in Wireless Sensor Networks
16. Wenjun Zhou, Rutgers University, May 2011
    Dissertation: Correlation Computing in Dynamic and Complex Data
17. Yong Ge, Rutgers University, May 2013
    Recommendations in Mobile and Pervasive Business Environments
18. Yuan Hong, Rutgers University, June 2013
    Dissertation: Privacy-preserving Collaborative Optimization
19. External Examiner, Giovanni Livraga, University of Milan, Jan 2014
    Dissertation: Preserving Privacy in Data Release
20. External Examiner, Ravi Jhawar, University of Milan, Jan 2014
    Dissertation: Dependability in Cloud Computing
21. External Examiner, Anant Vitthalrao Nimkar, Indian Institute of Technology, Kharagpur, August 2015
    Dissertation: Secured Multi-tenant Network Collocation in Horizontal IaaS Federation
22. External Examiner, Gerson Antunes Soares, University of Milan, November 2016
    Dissertation: Advanced SLA Management in Cloud Computing
23. External Examiner, Ayesha Afzal, Lahore University of Management Sciences, Lahore, Pakistan, 2018
    Dissertation: Collaborative Business Process Development in the Services Cloud

Comprehensive Examination Committee:

Nikolas Melissaris, Denghui Zhang, Xinyue Wang, Jingci Ming, Zixuan Yuan, Nathaniel Hobbs, Yueqing Zhang, Gunjan Batra, Tanay Talukdar, Dobopriya Ghosh, Abeer Elaharf, Hafiz Asif, Ussama Yaqub, Constantine Vitt, Can Chen, Farid Razzak, Jingyuan Yang, Yanjie Fu, Zijun Yao, Chuanren Liu, Bin Liu, David Lorenzi, Nazia Badar, Emre Uzun, Zhongmou Li, Yong Ge, Yuan Hong, Heechang Shin, Xinwin Zhou, Xioyun He, Haibing Lu, Qi Guo, Janice Warner, Aabhas Paliwal, Vandana Janeja, Dihua Guo, Ahmed Gomaa, Mahamoud Youseff Mohamed, Li Qin, Songmei Yu, Xin Wei, Jia Wu, Tanya Levina, Francisco Badua, Francis Mendez, Yu Cong, Rani Hoitash, Soon Ae Chun, Igg Adiwijaya, June-Suh Cho, Yuri Korostyshevski, Dong-Ho Kim, Richard Holowczak, Wei-Kuang Huang, Chao-Min Chiu, Sidan Lin, Barry Davis and Loverton Okwuosa.

Masters Student Supervision:

1. December 2000: Chiara Ghirardini, University of Milan
2. December 2001: Pietro Mazzoleni, University of Milan
3. May 2002: Anna Curridori, University of Milan

4. September 2004: Mukesh Sethi, Masters in Industrial and Systems Engineering, Dept of Industrial and Systems Engineering, Rutgers University
5. August 2015: Kimberly Seto, Masters in Information Technology and Analytics (MITA) Rutgers Business School (RBS)
6. May 2016: Sanhita Dutta Gupta,MITA, RBS
7. August 2016: Ravipal Kalra, Sheetafi Shishupal, MITA, RBS
8. December 2016: Spoorti Natesh, Neelakandan Anantharamakrishnan, Samir Joshi, Dwani Panchal, Ankit Chaudhary, Kaminee Shimpi, Pranay Singh, Hardik Singh, Meghna Singh, Darsha Tawde, MITA, RBS
9. May 2017: Madhuar Bhogale, MITA, RBS
10. December 2017: Saurav Bhattacharyya, Abhishek Gupta, Siddhant Naik, Rachit Pabreja, Sreevarsha Putcha, Ruchi Dhirenkuar Shah, Nitesh Sharma, Amit Singh, Shraddha Somani, Ankit Sunil Tyagi, MITA, RBS
11. May 2018: Fancy Arora, Ekta Kesaria, Nitin Mali, Deep Nakum, Pallavi Rushab, MITA, RBS
12. August 2018: Kopal Agrawal, Venica Vivian Falcao, Siddhant Sandeep Kawale, Jagruti Patel, Kusshal Rao, MITA, RBS
13. December 2018: Vaibhav Sanjay Bavishi, Samiddha Banerjee, Pranav Bedekar, Sagar Desai, Shreya Navelkar, Ruchi Jain, Abhilash Basuru Yethesh Kumar, Harjeet Singh Jaggi, Darwin Desai, Krishna Dhruv, Prabhat Johl, Pradnya Prabhudesai, MITA, RBS
14. May 2019: Nikitha Chandrashekaraiah Reddy, Trisha Dhotkar, Vijaya Ashok Patil, Shipra Yadav, MITA, RBS
15. August 2019: Shweta Suhas Karale, MITA, RBS
16. December 2019: Crescent Bardeskar, Daksh Gupta, Shweta Suhas Karale, MITA, RBS
17. December 2020: Neeraj Harjani, Twinkle Motwani, Vinit Umesh Pednekar, MITA, RBS

COURSES TAUGHT:

Courses Taught at Rutgers:

1. 26:198:731 Applications of Database Systems (Ph.D.)
2. 26:198:732 Multimedia Information Systems (Ph.D.) (first to offer)
3. 26:198:685 Information Security (Ph.D.) (first to offer)
4. 22:198:649 Introduction to Electronic Commerce (M.B.A.) (first to offer)
5. 22:198:611 Security for Electronic Commerce (M.B.A.) (first to offer)
6. EC2: Security for Electronic Commerce (Certificate Program in Electronic Commerce) (first to offer)
7. 22:198:603 Database Systems (M.B.A.)
8. 22:198:604 Computers & Information Systems (M.B.A.)
9. 22:198:605 Computer Technology (M.B.A.)
10. 29:623:220 Management Information Systems (Undergraduate, Newark)
11. 29:623:319 Database Management (Undergraduate, Newark)

Independent Study

1. M.B.A.: Yue Wang, Barton Karboz, Johnathan Sloan
2. Ph.D.: Soon Ae Chun, Li Qin, Songmei Yu, Vandana Janeja, Dihua Guo, Ahmed Gomaa, Mahamoud Youseff Mohamed

Courses Taught at Other Schools: Several graduate and undergraduate courses in Computer Science and Engineering including Database Management Systems, Computers & Information Systems, Operating Systems, Programming Languages, Management Information Systems, Microprocessors and Applications, Logical design of digital computers, Computer Architecture, Integrated Circuits and Applications, Basic Electronics, Analog and Digital Circuits, Circuit Theory, Networks and Transmission Lines, Control Systems, Communication Systems, Power Electronics.

NEW COURSES DEVELOPED:

1. 26:198:685 Information Systems Security (Ph.D.)
2. 26:198:732 Multimedia Information Systems (Ph.D.)
3. 22:198:649 Introduction to Electronic Commerce (M.B.A.) (jointly with Nabil R. Adam)
4. 22:198:611 Security for Electronic Commerce (M.B.A.) (jointly with Nabil R. Adam)
5. EC2: Security for Electronic Commerce (Certificate Program in Electronic Commerce)
6. 29:623:375 Computer Network Applications (Undergraduate, Newark) (jointly with Nabil R. Adam)
7. 29:623:325 Computer Information Systems: Technology and Applications (Undergraduate, Newark) (jointly with Nabil R. Adam)

UNIVERSITY SERVICE:

Department:

1. Chair, TT and NTT Hiring Committee, MSIS Department, 2021-22
2. Hiring Committee, MSIS Department, 2018-19
3. Education Committee, MSIS Department, 2015-16
4. Hiring Committee, MSIS Department, 2015-16
5. Acting Chair, MSIS Department, Jan 2011 - June 2011
6. Chair, Faculty Search Committee, 2010-11
7. Member, Faculty Search Committee, 1997-98, 1996-97, 2001-02, 2003-04
8. Member, Department's Hiring Needs Assessment Committee, 2001
9. Coordinator, For the course "Management Information Systems" (29:623:220) (1997-2000)
10. Member, MIS Course Study Team, 1996-97
11. Member, MIS Programs Study Team, 1996-97

School:

1. Director, MITA Program, 2005- 2011, 2015 - 2018
2. Co-Director, MITA Program, 2019-
3. Search committee for Vice Dean for Academic Programs, Teaching & Learning Excellence, 2022
4. Special programs policy committee, 2019-2020
5. Ph.D. IT coordinator, 2004-2011, 2014-2016

6. Member, Appointments and Promotions (A&P) Committee, 2013-14, 2014-15, 2015-16
7. Member, Search Committee for the RBS Dean, 2010
8. Member, Technology Policy Committee, 2008-2010
9. Member, Research Resources Committee, 2009-2010
10. Member, Search committee for the Director of Information Technology, 2008
11. Member, Ph.D. Executive Committee (elected, 2003 - 2010)
12. Chair and Coordinator, Master of Information Technology Governing Committee (2006-)
13. Member, RBS junior faculty research awards evaluation committee (2005,2006,2008,2009)
14. Member, MBA policy committee (2006)
15. Member, Provost's Committee for Strengthening the Ph.D. program, 2004
16. Member, Teaching Innovations Committee (2002-2003)
17. Member, Courses of Study Committee (2002)
18. Member, Information Systems Committee (2001)
19. Member, Courses of Study Committee, Graduate School-Newark, 1998-1999
20. Member, Ph.D. Admissions Committee, 1996-97
21. Member, Ph.D. Program Committee, 1997-98
22. Member, Affirmative Action Committee, 1997-98, 1996-97, 1995-96
23. Member, Computer Policy Committee, 1995-96
24. Member, Library Committee, 1994-95

Campus:

1. Search Committee, Research Contract/Grant Specialist, 2018-19
2. Search Committee, Senior Grant Facilitator, 2015
3. Newark Faculty Council, 2006-2009
4. Research Computing Advisory Committee, 2009 -

SERVICE TO THE SOCIETY:

1. Computer Science Advisory Board, University of the People, 2010-
   The University of People is a tuition-free university providing college-level education to the under-privileged people around the world who cannot afford the standard tuition-based education (the very first graduation was in April 2019).
2. Volunteer, Summer Camp for the inner city school (middle and high) children from the under-represented groups of Newark, NJ, organized by CIMIC, 1998 - 2015.
   The purpose of these summer camps is to provide them with enriched hands-on instruction in information technology and make them interested in higher education in general.
3. Volunteer, The MUSIC (Making Healthy Multi User Sessions In Community) Computer Camp in the Summer of 1996.
4. Offered seminar "The Internet: Resources in Medical Education, Research and Practice," along with the members of CIMIC for the American Association for Clinical Chemistry, Inc., held on April 28, 1995.
5. Offered the seminar "The Internet: An Introduction with Resources in Medicine and Medical Education," by members of CIMIC. Held at the Faculty of Management, Newark, February 10, 1995. Over 20 physicians, surgeons, nursing and library staff attended the seminar.