Ninghui Li

Department of Computer Science & CERIAS
Purdue University
305 North University Street
West Lafayette, IN 47907-2107

Phone: (765)496-6756
Fax: (765)494-0739
Email: ninghui@cs.purdue.edu
Home page: http://www.cs.purdue.edu/people/ninghui

EMPLOYMENT HISTORY

Purdue University — West Lafayette, IN
Associate professor, Department of Computer Science — July 2008 — Present
Assistant professor, Department of Computer Science — August 2003 — June 2008

Stanford University — Stanford, CA
Research associate, Department of Computer Science — September 2000 — July 2003
Supervisor: John C. Mitchell

EDUCATION

New York University — New York, NY
Ph.D. student, Department of Computer Science — September 1995 — August 2000

- Ph.D. in Computer Science — September 2000
  Dissertation: *Delegation Logic: A Logic-based Approach to Distributed Authorization*
  Advisor: Joan Feigenbaum

- M.S. in Computer Science — January 1998

The Graduate School of Chinese Academy of Sciences — Beijing, China
Graduate student — September 1993 — June 1995

University of Science and Technology of China — Hefei, Anhui, China
Undergraduate student, Special Class for Gifted Young — September 1988 — July 1993

- B.S. in Computer Science — July 1993
  Dissertation: *An Object Oriented Knowledge-Base System*
  Advisor: Zhongzhi Shi

PUBLICATIONS

Journal Articles

1 Chris Gates, Jing Chen, Ninghui Li, Robert Proctor. Effective Risk Communication for Android Apps. Accepted to appear in IEEE TDSC.

2 Wahbeh Qardaji, Weining Yang, and Ninghui Li. Understanding Hierarchical Methods for Differentially Private Histograms. PVLDB 2013.

3 Mahesh Tripunitara and Ninghui Li. The Foundational work of Harrison-Ruzzo-Ullman Revisited. IEEE TDSC, 10(1):28-39, 2013.

4 Ninghui Li, Wahbeh Qardaji, Dong Su, and Jianneng Cao. PrivBasis: Frequent Itemset Mining with Differential Privacy. PVLDB 5(11):1340-1351, 2012.

5   Tiancheng Li and Ninghui Li. Slicing: A New Approach to Privacy Preserving Data Publishing. *IEEE Transactions on Knowledge and Data Engineering* 24(3): 561-574 (2012).

6   Ziqing Mao, Ninghui Li, Hong Chen, and Xuxian Jiang. Combining Discretionary Policy with Mandatory Information Flow in Operating Systems. *ACM Transactions on Information and System Security (TISSEC)* 14(3): 30 pages (2011).

7   Yuqing Sun, Qihua Wang, Ninghui Li, Elisa Bertino, and Mikhail Atallah. On the Complexity of Authorization in RBAC under Qualification and Security Constraints. *IEEE Transactions on Dependable and Secure Computing* 8(6): 883-897 (2011)

8   Prathima Rao, Dan Lin, Elisa Bertino, Ninghui Li, Jorge Lobo. Fine-grained integration of access control policies. *Computers & Security* 30(2-3): 91-107 (2011).

9   Graham Cormode, Divesh Srivastava, Tiancheng Li, and Ninghui Li. Minimizing Minimality and Maximizing Utility: Analyzing Methodbased attacks on Anonymized Data. PVLDB, 1045-1056, 2010.

10 Ian Molloy, Hong Chen, Tiancheng Li, Qihua Wang, Ninghui Li, Elisa Bertino, Seraphin Calo, and Jorge Lobo. Mining Roles with Multiple Objectives. *ACM Transactions on Information and System Security (TISSEC)*, 13(4), 30 pages, December 2010.

11 Qihua Wang and Ninghui Li. Satisfiability and Resiliency in Workflow Systems. *ACM Transactions on Information and System Security (TISSEC)*, 13(4), 30 pages, December 2010.

12 Prathima Rao, Dan Lin, Elisa Bertino, Ninghui Li, Jorge Lobo. EXAM - A Comprehensive Environment for the Analysis of Access Control Policies. *International Journal of Information Security*, 9(4):253-273, August 2010 .

13 Ninghui Li, Tiancheng Li, and Suresh Venkatasubramanian. Closeness: A New Privacy Measure for Data Publishing. *IEEE Transactions on Data and Knowledge Engineering (TKDE)*, 22(7): 943-956, 2010.

14 Jiangtao Li, Ninghui Li, and William H. Winsborough. Automated Trust Negotiation Using Cryptographic Credentials. *ACM Transactions on Information and System Security (TISSEC)*, 13(1), 35 pages, October 2009.

15 Ninghui Li, Qihua Wang, and Mahesh V. Tripunitara. Resiliency Policies in Access Control. *ACM Transactions on Information and Systems Security (TISSEC)*, 12(4), 34 pages, April 2009.

16 Jiangtao Li, Ninghui Li, Xiaofeng Wang, and Ting Yu. Denial of Service Attacks and Defenses in Decentralized Trust Management. *International Journal on Information Security*, 8(2):89-101, April 2009.

17 Ji-Won Byun, Tiancheng Li, Elisa Bertino, Ninghui Li, and Yonglak Sohn. Privacy Preserving Incremental Data Dissemination. *Journal of Computer Security.* 17(1): 43-68. January 2009.

18 Somesh Jha, Ninghui Li, Mahesh V. Tripunitara, Qihua Wang, and William H. Winsborough. Towards Formal Verification of Role-Based Access Control Policies. *IEEE Transactions on Dependable and Secure Computing (TDSC).* 5(4):242–255, Oct.-Dec. 2008.

19 Ninghui Li and Qihua Wang. Beyond Separation of Duty: An Algebra for Specifying High-level Security Policies. *Journal of the ACM.* 55(3), 46 pages, July 2008.

20 Ji-won Byun and Ninghui Li. Purpose Based Access Control for Privacy Protection in Relational Database Systems. *The VLDB Journal.* 17(4): 603-619, July 2008.

21 Tiancheng Li and Ninghui Li. Towards optimal k-anonymization.. *Data and Knowledge Engineering.* 23(2): 166–175, April 2008.

22 Rui Xue, Ninghui Li, and Jiangtao Li. Algebraic Construction for Zero-Knowledge Sets. *Journal of Computer Science and Technology (JCST)*. 23(2): 166-175, March 2008.

23 Ninghui Li, Mahesh V. Tripunitara, and Ziad Bizri. On Mutually Exclusive Roles and Separation of Duty. *ACM Transactions on Information and System Security (TISSEC)*. 10(2), May 2007.

24 Mahesh V. Tripunitara and Ninghui Li. A Theory for Comparing the Expressive Power of Access Control Models. *Journal of Computer Security (JCS)*. 15(2):231–272, March 2007.

25 Ninghui Li and Mahesh V. Tripunitara. Security Analysis in Role-Based Access Control. *ACM Transactions on Information and System Security (TISSEC)*. 9(4):391–420, November 2006.

26 Jiangtao Li and Ninghui Li. OACerts: Oblivious Attribute Certificates. *IEEE Transactions on Dependable and Secure Computing (TDSC)*. 3(4):340–352, October 2006.

27 Ninghui Li, Ting Yu, and Annie I. Anton. A Semantics-based Approach to Privacy Policies. *International Journal of Computer Systems Science and Engineering.* 21(5), September 2006.

28 William H. Winsborough and Ninghui Li. Safety in Automated Trust Negotiation. *ACM Transactions on Information and System Security (TISSEC)*. 9(3):352–390, August 2006.

29 Ninghui Li and John C. Mitchell. Understanding SPKI/SDSI Using First-Order Logic. *International Journal of Information Security.* 5(1):48–64, January 2006.

30 Ninghui Li, John C. Mitchell, and William H. Winsborough. Beyond Proof-of-compliance: Security Analysis in Trust Management. *Journal of the ACM.* 52(3):474–514, May 2005.

31 Ninghui Li, Wenliang Du, and Dan Boneh. Oblivious Signature-Based Envelope. *Distributed Computing.* PODC 2003 Special Issue, 17(4):293–302, May 2005.

32 Ninghui Li, William H. Winsborough, and John C. Mitchell. Distributed credential chain discovery in trust management. *Journal of Computer Security.* 11(1):35–86, February 2003.

33 Ninghui Li, Benjamin N. Grosof, and Joan Feigenbaum. Delegation Logic: a logic-based approach to distributed authorization. *ACM Transactions on Information and System Security (TISSEC)*. 6(1):128–171, February 2003.

Magazine Articles

34 Debin Liu, Ninghui Li, XiaoFeng Wang, and L. Jean Camp. Security Risk Management Using Incentives.. *IEEE Security & Privacy* 9(6): 20-28 (2011)

35 Ninghui Li, Ji-won Byun, and Elisa Bertino. A Critique of the ANSI Standard on Role Based Access Control. *IEEE Security and Privacy* 5(6):41–49, November 2007.

36 Annie I. Anton, Elisa Bertino, Ninghui Li, and Ting Yu. A Roadmap for Comprehensive Online Privacy Policy Management. *Communications of the ACM.* 50(7):109–116, July 2007.

Edited Conference Proceedings

37 Kefei Chen, Qi Xie, Weidong Qiu, Ninghui Li, and Wen-Guey Tzeng. ASIACCS 2013: Proceedings of the 8th ACM SIGSAC Symposium on Information, Computer and Communications Security. ACM Press.

38 Elena Ferrari, Ninghui Li, Elisa Bertino, and Yuecel Karabulut. Trust Management: Proceedings of IFIPTM 2009. Springer.

39 Indrakshi Ray and Ninghui Li. SACMAT'08: Proceedings of the 13th ACM Symposium on Access Control Models and Technologies. ACM Press.

40 Peng Ning, Sihan Qing, Ninghui Li. Information and Communications Security, Proceedings of the 8th International Conference (ICICS 2006). LNCS 4307, Springer.

Book

41 Anupam Datta, Somesh Jha, Ninghui Li, David Melski, Thomas W. Reps: Analysis Techniques for Information Security. Morgan & Claypool Publishers, 2010.

Book Chapters

42 Ninghui Li. Data Encryption. Encyclopedia of Database Systems 2009:574.

43 Ninghui Li. Homomorphic Encryption. Encyclopedia of Database Systems 2009: 1320.

44 Ninghui Li. Asymmetric Encryption. Encyclopedia of Database Systems 2009: 142.

45 Ninghui Li. Symmetric Encryption. Encyclopedia of Database Systems 2009: 2897-2898.

46 Elisa Bertino, Ji-Won Byun, and Ninghui Li. Privacy-Preserving Database Systems. in *Foundations of Security Analysis and Design III, FOSAD 2004/2005 Tutorial Lectures*, LNCS 3655, pages 178–206, Springer 2005.

Refereed Conference and Workshop Papers

47 Ninghui Li, Wahbeh Qardaji, Dong Su, Yi Wu, Weining Yang. Membership Privacy: A Unifying Framework For Privacy Definitions. In *Proceedings of ACM CCS* 2013: 12 pages.

48 Wahbeh Qardaji, Weining Yang, Ninghui Li. Differentially Private Grids for Geospatial Data. In *Proceedings of ICDE* 2013: 12 pages.

49 Jianneng Cao, Qian Xiao, Gabriel Ghinita, Ninghui Li, Elisa Bertino, Kian-Lee Tan. Efficient and accurate strategies for differentially-private sliding window queries. In *Proceedings of EDBT* 2013: pp. 191-202.

50 Chris Gates, Ninghui Li, Jing Chen, Robert Proctor. CodeShield: Towards Personalized Application Whitelisting. In *Proceedings of Annual Computer Security Applications Conference (ACSAC)*, pp. 279-288, 2012. Acceptance rate 19% (44/231).

51 Weining Yang, Ninghui Li, Yuan Qi, Wahbeh Qardaji, Steven McLaughlin and Patrick McDaniel. Minimizing Private Data Disclosures in the Smart Grid. In *Proceedings of ACM Conference on Computer and Communications Security (CCS)*, pp. 415–427, 2012. Acceptance rate 19% (80/423).

52 Hao Peng, Chris Gates, Bhaskar Sarma, Ninghui Li, Alan Qi, Rahul Potharaju, Cristina Nita-Rotaru and Ian Molloy. Using Probabilistic Generative Models For Ranking Risks of Android Apps. In *Proceedings of ACM Conference on Computer and Communications Security (CCS)*, pp. 241–252, 2012. Acceptance rate 19% (80/423).

53 Bhaskar Sarma, Ninghui Li, Chris Gates, Rahul Potharaju, Cristina Nita-Rotaru and Ian Molloy. Android Permissions: A Perspective Combining Risks and Benefits. In *ACM Symposium on Access Control Models and Technologies (SACMAT)*, pp. 13–22, 2012. Acceptance rate 24% (18/74).

54 Ninghui Li, Wahbeh Qardaji, and Dong Su. On Sampling, Anonymization, and Differential Privacy Or, K-Anonymization Meets Differential Privacy. In *Proceedings of ACM Symposium on Information, Computer and Communications Security (ASIACCS)*, 12 pages, 2012. Acceptance rate 23% (36/159).

55 Wahbeh Qardaji and Ninghui Li. Recursive Partitioning and Summarization: A Practical Framework for Differentially Private Data Publishing. *ACM Symposium on Information, Computer and Communications Security (ASIACCS)*, 13 pages, 2012. Acceptance rate 23% (36/159).

56 Wahbeh Qardaji and Ninghui Li. Anonymizing Network Traces with Temporal Pseudonym Consistency. *Proceedings of ICDCS Workshops*, pp. 622-633, 2012.

57 Ninghui Li, Haining Chen, Elisa Bertino. On Practical Specification and Enforcement of Obligations. In *Proceedings of ACM Conference on Data and Application Security and Privacy (CO-DASPY)*, pp. 71–82, 2012. Acceptance rate 19% (21/113).

58 Ian Molloy and Ninghui Li. Attack on the GridCode One-Time Password. In *Proceedings of ACM Symposium on InformAtion, Computer and Communications Security (ASIACCS)*, pp. 306–315, March 2011. Acceptance rate 16% (35/215).

59 Debin Liu, Ninghui Li, XiaoFeng Wang, L. Jean Camp. Beyond Risk-Based Access Control: Towards Incentive-Based Access Control. In *Proceedings of International Conference on Financial Cryptography and Data Security*, pp. 102–112, 2011. Acceptance rate 29%(16/56).

60 Hong Chen, Ninghui Li, Christopher S. Gates, Ziqing Mao. Towards analyzing complex operating system access control configurations.. In *Proceedings of 2010 ACM Symposium on Access Control Models and Technologies (SACMAT)*: pp. 13–22, June 2010. Acceptance rate: 25% (19/75).

61 Ian Molloy, Ninghui Li, Yuan (Alan) Qi, Jorge Lobo, Luke Dickens. Mining roles with noisy data.. In *Proceedings of 2010 ACM Symposium on Access Control Models and Technologies (SACMAT)*: pp. 45–54, June 2010. Acceptance rate: 25% (19/75).

62 Nan Ding, Yuan Qi, Rongjing Xiang, Ian Molloy, Ninghui Li. Nonparametric Bayesian Matrix Factorization by Power-EP. In *Proceedings of the Thirteenth International Conference on Artificial Intelligence and Statistics*, pp. 169–176, May 13-15, 2010.

63 Ian Molloy, Ninghui Li, and Tiancheng Li. On the (In)Security and (Im)Practicality of Outsourcing Precise Association Rule Mining. In *Proceedings of The Ninth IEEE International Conference on Data Mining (ICDM 2009)*, pages 872–877, December 2009. Acceptance rate 18% (139/786).

64 Qihua Wang, Hongxia Jin, and Ninghui Li. Usable Access Control in Collaborative Environments: Authorization Based on People-Tagging. In *Proceedings of the 14th European Symposium on Research in Computer Security (ESORICS 2009)*, pages 268–284, September 2009. Acceptance rate 19% (42/220).

65 Tiancheng Li, Xiaonan Ma, and Ninghui Li. WORM-SEAL: Trustworthy Data Retention and Verification for Regulatory Compliance. In *Proceedings of the 14th European Symposium on Research in Computer Security (ESORICS 2009)*, pages 472–488, September 2009. Acceptance rate 19% (42/220).

66 Tiancheng Li and Ninghui Li. On the Tradeoff Between Privacy and Utility in Data Publishing. In *2009 ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD-09)*, June 2009. Acceptance rate 20% (105/537).

67 Ziqing Mao, Ninghui Li, Hong Chen, Xuxian Jiang. Trojan Horse Resistant Discretionary Access Control. In *Proceedings of 2009 ACM Symposium on Access Control Models and Technologies (SACMAT)*, pages 237–246, June 2009. Acceptance rate 32% (24/75).

68 Ninghui Li, Qihua Wang, Wahbeh Qardaji, Elisa Bertino, Prathima Rao, Jorge Lobo, Dan Lin. Access Control Policy Combination: Theory Meets Practice. In *2009 ACM Symposium on Access Control Models and Technologies (SACMAT))*, pages 135–144, June 2009. Acceptance rate 32% (24/75).

69 Ian Molloy, Ninghui Li, Tiancheng Li, Ziqing Mao, Qihua Wang, Jorge Lobo. Evaluating Role Mining Algorithms. In *2009 ACM Symposium on Access Control Models and Technologies (SACMAT)*, pages 95–104, June 2009. Acceptance rate 32% (24/75).

70 Guneshi Wickramaarachchi, Wahbeh Qardaji, and Ninghui Li. An Efficient Framework for User Authorization Query in RBAC Systems. In *2009 ACM Symposium on Access Control Models and Technologies (SACMAT)*, pages 23–32, June 2009. Acceptance rate 32% (24/75).

71 Prathima Rao, Dan Lin, Elisa Bertino, Ninghui Li, and Jorge Lobo. An Algebra for Fine-Grained Integration of XACML Policies. In *2009 ACM Symposium on Access Control Models and Technologies (SACMAT)*, pages 63–72, June 2009. Acceptance rate 32% (24/75).

72 Tiancheng Li, Ninghui Li, and Jian Zhang. Modeling and Integrating Background Knowledge in Data Anonymization. In Proceedings of the *2009 IEEE International Conference on Data Engineering (ICDE)*, pages 6–17, April 2009. Acceptance rate 19% (118/617).

73 Ziqing Mao, Ninghui Li, and Ian Molloy. Defeating Cross-Site Request Forgery Attacks with Browser-Enforced Authenticity Protection. In *Proceedings of 2009 International Conference on Financial Cryptography and Data Security (FC'09)*, pages 238–255, February 2009. Acceptance rate 27%, (20/75).

74 Hong Chen, Ninghui Li and Ziqing Mao. Analyzing and Comparing the Protection Quality of Security Enhanced Operating Systems. In *Proceedings of the 16th Annual Network & Distributed System Security Symposium (NDSS)*, 15 pages, February 2009.

75 Qihua Wang, Ninghui Li, Hong Chen. On the Security of Delegation in Access Control Systems. In *Proceedings of the 13th European Symposium on Research in Computer Security (ESORICS)*, pages 317–332, October 2008.

76 Hong Chen, Xiaonan Ma, Windsor Hsu, Ninghui Li, and Qihua Wang. Access Control Friendly Query Verification for Outsourced Data Publishing. In *Proceedings of the 13th European Symposium on Research in Computer Security (ESORICS)*, pages 177–191, October 2008.

77 Ian Molloy, Hong Chen, Tiancheng Li, Qihua Wang, Ninghui Li, Elisa Bertino, Seraphin Calo, and Jorge Lobo. Mining Roles with Semantic Meanings. In *2008 ACM Symposium on Access Control Models and Technologies (SACMAT)*, June 2008.

78 Dan Lin, Prathima Rao, Elisa Bertino, Ninghui Li, and Jorge Lobo. Policy Decomposition for Collaborative Access Control. In *2008 ACM Symposium on Access Control Models and Technologies (SACMAT)*, June 2008.

79 Tiancheng Li and Ninghui Li. Injector: Mining Background Knowledge for Data Anonymization. In *Proceedings of the 2008 IEEE International Conference on Data Engineering (ICDE)*, pages 446–455, April 2008. Acceptance rate 19% (118/617).

80 XiaoFeng Wang, Zhuowei Li, Ninghui Li, and Jong Youl Choi. PRECIP: Towards Practical and Retrofittable Confidential Information Protection. In *Proceedings of the 15th Annual Network & Distributed System Security Symposium (NDSS)*, 17 pages, Feburuary 2008.

81 Qihua Wang, Ting Yu, Ninghui Li, Jorge Lobo, Elisa Bertino, Ji-Won Byun and Keith Irwin. On the Correctness Criteria of Fine-Grained Access Control in Relational Databases. In *Proceedings of The 33rd International Conference on Very Large Data Bases (VLDB 2007)*, pages 555–566, September 2007. Acceptance rate 17% (91/538).

82 Qihua Wang and Ninghui Li. Satisfiability and Resiliency in Workflow Systems. In *Proceedings of the European Symposium on Research in Computer Security (ESORICS)*, pages 90–105, September 2007. Acceptance rate 24% (39/164).

83 Jiangtao Li, Ninghui Li, and Rui Xue. Universal Accumulators with Efficient Nonmembership Proofs. In *Proceedings of the 5th International Conference on Applied Cryptography and Network Security (ACNS)*, pages 253–169, June 2007. Acceptance rate 12% (31/260).

84 Ninghui Li, Ziqing Mao, and Hong Chen. Usable Mandatory Integrity Protection for Operating Systems. In *Proceedings of IEEE Symposium on Security and Privacy*, pp. 164–178, May 2007. Acceptance rate 9% (20 full papers/220 full submissions)

85 Ninghui Li, Tiancheng Li, and Suresh Venkatasubramanian. t-Closeness: Privacy Beyond k-Anonymity and ℓ-Diversity. In *Proceedings of International Conference on Data Engineering (ICDE)*, pages 106–115, April 2007. Acceptance rate 19% (122/659).

86 Ji-Won Byun, Ashish Kamra, Elisa Bertino, and Ninghui Li. Efficient k-Anonymization using Clustering Techniques. In *Proceedings of International Conference on Database Systems for Advanced Applications (DASFAA)*, pages 188-200, April 2007. Acceptance rate 18% (68/375).

87 Ninghui Li and Ziqing Mao. Administration in Role Based Access Control. In *Proceedings of ACM Symposium on InformAtion, Computer and Communications Security (ASIACCS)*, pp. 127–138, March 2007. Acceptance rate 18% (33/180).

88 Qihua Wang and Ninghui Li. Direct Static Enforcement of High-level Policies. In *Proceedings of ACM Symposium on InformAtion, Computer and Communications Security (ASIACCS)*, pp. 214–225, March 2007. Acceptance rate 18% (33/180).

89 Ian Molloy, Jiangtao Li, and Ninghui Li. Dynamic Virtual Credit Card Numbers. In *Proceedings of the International Conference on Financial Cryptography and Data Security (FC)*, pages 208–223, February 2007. Acceptance rate 21%. (18/85).

90 Tiancheng Li and Ninghui Li. Optimal k-Anonymity with Flexible Generalization Schemes through Bottom-up Searching. In *IEEE International Workshop on Privacy Aspects of Data Mining (PADM'06)*, *Proceedings of ICDM Workshops*, pages 518–523, December 2006. Acceptance rate 38% (11/29).

91 Jiangtao Li and Ninghui Li. An Efficient Oblivious Commitment Based Envelope Protocol. In *Proceedings of the Eighth International Conference on Information and Communications Security (ICICS)*, pages 122–138, December 2006. Acceptance rate 19% (22/119) **Best paper award.**

92 Ziqing Mao, Ninghui Li, and William H. Winsborough. Distributed Credential Chain Discovery in Trust Management with Parameterized Roles and Constraints (Short Paper). In *Proceedings of the Eighth International Conference on Information and Communications Security (ICICS)*, pages 159–173, December 2006. Acceptance rate 33% (22 regular+17 short/119)

93 Ninghui Li and Qihua Wang. Beyond Separation of Duty: An Algebra for Specifying High-level Security Policies. In *Proceedings of the ACM Conference in Computer and Communications Security (CCS)*, pages 356–369, November 2006. Acceptance rate 15% (38/256).

94 Ninghui Li, Mahesh V. Tripunitara, and Qihua Wang. Resiliency Policies in Access Control. In *Proceedings of the ACM Conference in Computer and Communications Security (CCS)*, pages 113–123, November 2006. Acceptance rate 15% (38/256).

95 Xiaoxin Wu and Ninghui Li. Achieving Privacy in Mesh Networks. In *Proceedings of the 4th ACM Workshop on Security of ad hoc and Sensor Networks (SASN)*, pages 13–22, October 2006. Acceptance rate unknown.

96 Ji-Won Byun, Yonglak Sohn, Elisa Bertino, Ninghui Li. Secure Anonymization for Incremental Datasets. In *VLDB Workshop on Secure Data Management (SDM)*, pages 24–63, September 2006. Acceptance rate 39% (13/33).

97 Jiangtao Li, Ninghui Li, Xiaofeng Wang, and Ting Yu. Denial of Service Attacks and Defenses in Decentralized Trust Management. In *Proceedings of the Second International Conference on Security and Privacy in Communication Networks (SecureComm)*, August 2006. Acceptance rate 25% (32/126).

98 Hong Chen and Ninghui Li. Constraint Generation for Separation of Duty. In *Proceedings of ACM Symposium on Access Control Models and Technologies (SACMAT)*, pages 130–138, June 2006. Acceptance rate 30% (25/82).

99 Jiangtao Li, Ninghui Li, and William H. Winsborough. Automated Trust Negotiation Using Cryptographic Credentials. In *Proceedings of ACM Conference on Computer and Communications Security (CCS)*, pages 46–57, November 2005. Acceptance rate 15% (38/249).

100 Jiangtao Li and Ninghui Li. Policy-Hiding Access Control in Open Environment. In *Proceedings of ACM Symposium on Principal of Distributed Computing (PODC)*, pages 29–38, July 2005. Acceptance rate 23% (32/160).

101 Jiangtao Li and Ninghui Li. OACerts: Oblivious Attribute Certificates. In *Proceedings of the 3rd Applied Cryptography and Network Security Conference (ACNS)*, pages 301–317, June 2005. Acceptance rate 22% (35/158).

102 Ji-Won Byun, Elisa Bertino, and Ninghui Li. Purpose Based Access Control of Complex Data for Privacy Protection. In *Proceedings of ACM Symposium on Access Control Models and Technologies (SACMAT)*, pages 102–110, June 2005. Acceptance rate 21% (19/90).

103 Ninghui Li and Mahesh V. Tripunitara. On Safety in Discretionary Access Control. In *Proceedings of IEEE Symposium on Security and Privacy*, pages 96–109, May 2005. Acceptance rate 8% (17/192).

104 Ninghui Li, John C. Mitchell, and Derrick Tong. Securing Proxy-Based Distributed Systems. In *Proceedings of Annual Computer Security Applications Conference (ACSAC)*, pages 262–271, December 2004. Acceptance rate 26% (35/135).

105 Ninghui Li, Ziad Bizri, and Mahesh V. Tripunitara. On Mutually Exclusive Roles and Separation of Duty. In *Proceedings of ACM Conference on Computer and Communications Security (CCS)*, pages 42–51, October 2004. Acceptance rate 14% (35/252).

106 Mahesh V. Tripunitara and Ninghui Li. Comparing the Expressive Power of Access Control Models. In *Proceedings of ACM Conference on Computer and Communications Security (CCS)*, pages 62–71, October 2004. Acceptance rate 14% (35/252).

107 Ting Yu, Ninghui Li, and Annie I. Antón. A Formal Semantics for P3P. In *Proceedings of ACM Workshop on Secure Web Services (SWS)*, October 2004. Acceptance rate 38% (11/29).

108 Cristina Nita-Rotaru and Ninghui Li. A Framework for Role-Based Access Control in Group Communication Systems. In *Proceedings of 17th International Conference on Parallel and Distributed Computing Systems (PDCS-2004) Security Workshop*, pages 522–529, June 2004. Acceptance rate unknown.

109 Ninghui Li and Mahesh V. Tripunitara. Security Analysis in Role-Based Access Control. In *Proceedings of ACM Symposium on Access Control Models and Techniques (SACMAT)*, pages 126–135, June 2004. Acceptance rate 28% (18/659).

110 William H. Winsborough and Ninghui Li. Safety in Automated Trust Negotiation. In *Proceedings of IEEE Symposium on Security and Privacy*, pages 147–160, May 2004. Acceptance rate 10% (19/189).

111 Ninghui Li, Wenliang Du, and Dan Boneh. Oblivious signature-based envelope. In *Proceedings of ACM Symposium on Principles of Distributed Computing (PODC 2003)*, pages 182–189, July 2003. Acceptance rate: 16% (34/208).

112 Ninghui Li and John C. Mitchell. Understanding SPKI/SDSI using first-order logic. In *Proceedings of IEEE Computer Security Foundations Workshop (CSFW)*, pages 89–103, June 2003. Acceptance rate: 26% (17/65).

113 Ninghui Li, William H. Winsborough, and John C. Mitchell. Beyond proof-of-compliance: safety and availability analysis in trust management. In *Proceedings of IEEE Symposium on Security and Privacy*, pages 123–139, May 2003. Acceptance rate: 15% (19/131).

114 Ninghui Li and John C. Mitchell. *RT*: a role-based trust-management framework. In *Proceedings of the Third DARPA Information Survivability Conference and Exposition (DISCEX III)*. April 2003. Acceptance rate: 30% (27/90).

115 Ninghui Li and John C. Mitchell. Datalog with constraints: a foundation for trust-management languages. In *Proceedings of the Fifth International Symposium on Practical Aspects of Declarative Languages (PADL 2003)*, pages 58–73, January 2003. Acceptance rate: 40% (23/57).

116 William H. Winsborough and Ninghui Li. Protecting sensitive attributes in automated trust negotiation. In *Proceedings of ACM Workshop on Privacy in the Electronic Society (WPES)*, pages 41–51, November 2002. Acceptance rate: 28% (12/43).

117 William H. Winsborough and Ninghui Li. Towards practical automated trust negotiation. In *Proceedings of the Third International Workshop on Policies for Distributed Systems and Networks (POLICY 2002)*, pages 92–103, June 2002. Acceptance rate: 25% (17/67).

118 Ninghui Li, John C. Mitchell, and William H. Winsborough. Design of a role-based trust-management framework. In *Proceedings of 2002 IEEE Symposium on Security and Privacy*, pages 114–130, May 2002. Acceptance rate: 22% (21/95).

119 Ninghui Li, William H. Winsborough, and John C. Mitchell. Distributed credential chain discovery in trust management (extended abstract). In *Proceedings of the 8th ACM Conference on Computer and Communications Security (CCS-8)*, pages 156–165, November 2001. Acceptance rate: 18% (27/153).

120 Ninghui Li and Joan Feigenbaum. Nonmonotonicity, user interfaces, and risk assessment in certificate Revocation (position paper). In *Proceedings of the Fifth International Conference on Financial Cryptography (FC'01)*, pages 166–177, February 2001. Acceptance rate unknown.

121 Ninghui Li. Local names in SPKI/SDSI 2.0. In *Proceedings of the 13th IEEE Computer Security Foundations Workshop (CSFW-13)*, pages 2–15, July 2000. Acceptance rate: 44% (21/48).

122 Ninghui Li, Benjamin N. Grosof, and Joan Feigenbaum. A practically implementable and tractable Delegation Logic. In *Proceedings of the 21st IEEE Symposium on Security and Privacy*, pages 27–42, May 2000. Acceptance rate: 13% (18/137).

123 Ninghui Li, Joan Feigenbaum, and Benjamin N. Grosof. A logic-based knowledge representation for authorization with delegation (extended abstract). In *Proceedings of the 12th IEEE Computer Security Foundations Workshop (CSFW-12)*, pages 162–174, June 1999. Acceptance rate: 40% (19/47).

Other Papers

124 Chenyun Dai, Gabriel Ghinita, Elisa Bertino, Ji-Won Byun, and Ninghui Li. TIAMAT: a Tool for Interactive Analysis of Microdata Anonymization Techniques. Demo paper in Proceedings of the VLDB Endowment (PVLDB) 2(2): 1618-1621 (2009).

Research Funding

1 TWC SBE: Medium: Collaborative: User-Centric Risk Communication and Control on Mobile Devices, 8/1/2013 to 7/31/2016, National Science Foundation, 1314688, $820,000, PI.

2 IBM OCR Project on Analytics for Insider Threat Detection and Prevention, 4/1/2013 to 3/31/2014. IBM T.J. Watson Research Center, $100,000. PI.

3 Risk Mining and Communication for Android Apps. Google. 9/1/2012 — 8/31/2013, $44,000. PI.

4 Towards a Scientific Basis for User Centric Security Design, Army Research Office, 5/15/2012-12/31/2013, $157,166. PI.

5 TC: Small: Provably Private Microdata Publishing. National Science Foundation. NSF CNS-1116991. 09/01/2011 - 08/31/2014, $439,227, PI.

6 TC: Medium: Collaborative Research: Techniques to Retrofit Legacy Code. NSF 0905442-CNS. 09/01/2009 - 08/31/2012. $300,000, PI.

7 A Framework for Managing Assured Information Lifecycle (PI: Elisa Bertino). 5/1/08 — 4/30/2013. $1,500,000, Co-PI. Subcontracted from UMBC.

8 Utility and Privacy in Data Anonymization. Google. 1/1/09 — 12/31/10, $60,000. PI.

9 IBM OCR Project on Privacy and Security Management (PI: Elisa Bertino). 09/01/06 — 08/31/08. $400,000, Co-PI.

10 CAREER: Access Control Policy Verification Through Security Analysis And Insider Threat Assessment. NSF CNS-0448204. 06/01/05 — 05/31/10. $400,000, PI.

11 Collaborative Research: A Comprehensive Policy-Driven Framework for Online Privacy Protection: Integrating IT, Human, Legal and Economic Perspectives. NSF IIS-0430274. (PI: Elisa Bertino) 09/15/04 — 09/14/07. $666,000, Co-PI.

12 ITR: Automated Trust Negotiation in Open Systems. NSF CCR-0325951, (PI: Kent Seamons) 09/01/03 — 08/31/08. $1,750,000. Subcontracted from Brigham Young University. PI of the subcontract ($210,000).

13 Administration of Role-Based Access Control. Purdue Research Foundation, 06/15/04 — 06/14/07. $29,627. PI.

STUDENTS

Graduated Ph.D. Students

1 Mahesh V. Tripunitara (Ph.D. December 2005) Joined Motorola Labs. Currently with University of Waterloo.

   Dissertation: "A Theory Based On Security Analysis For Comparing The Expressive Power of Access Control Models".

2 Jiangtao Li (Ph.D. May 2006, Co-advised with Professor Mike Atallah) Joined Intel.

   Dissertation: "Privacy Enhanced Automated Trust Negotiation".

3 Ji-Won Byun (Ph.D. May 2007, Co-advised with Professor Elisa Bertino) Joined Oracle.

   Dissertation: Towards Privacy-Preserving Database Management Systems — Access Control and Data Anonymization.

4 Qihua Wang (Joined in August 2004, Ph.D. May 2009) Joined IBM Almaden Research Center. Currently with Google.

   Dissertation: Access Control Policy Management.

5 Ziqing Mao (Joined in August 2005, Ph.D. December 2009) Joined Facebook.

   Dissertation: Improving Real-World Access Control Systems by Indentifying the True Origins of a Request.

6 Hong Chen (Joined in August 2004, Ph.D. December 2009) Joined Knight Financials.

   Dissertation: Analysis of Access Control Policies in Operating Systems.

7 Ian Molloy (Joined in August 2004, Ph.D. August 2010) Joined IBM T.J.Watson Research Center

   Dissertation: Automatic Inference of Access Control Policies and Migration to Role Based Access Control

8 Tiancheng Li (Joined in August 2005, Ph.D. August 2010) Joined Google, Inc.

   Dissertation: Privacy Preservation in Data Publishing and Sharing.

9 Wahbeh Qardaji (Joined in August 2008, Ph.D. May 2012) Joined Google, Inc.

   Dissertation: Differentially Private Data Publishing: From Histograms to Transaction Sets

Graduate Students Under Supervision

10 Chris Gates (Joined CERIAS PhD program in January 2009, and CS graduate program in January 2010, Passed Quals)

Operating system access control, Android security, Usability

11 Dong Su (Joined in August 2010, Passed Quals)

DifferenData anonymization.

12 Haining Chen (Joined in August 2010, Passed Quals, co-advised with Prof. Elisa Bertino)

Access control languages.

13 Weining Yang (Joined in August 2011)

14 Wei-yen Day (Joined in August 2011)

Professional Organization and Services

Membership

- ACM Distinguished Scientist

- IEEE Senior Member

Professional Organization

- **Vice Chair**, ACM Special Interest Group in Security, Audit, and Control (SIGSAC). July 2013–present.

Editorial Board

- **Associate Editor**, Journal of Computer Security. January 2014–present.

- **Associate Editor**, IEEE Transactions on Dependable and Secure Computing. November 2011–present.

- **Associate Editor**, The VLDB Journal. September 2007– August 2013.
  The VLDB Journal is ranked 5th of all journals in ISI's field Computer Science, Information Systems according to impact factor.

Conference and Workshop Organization

- Steering Committee Member:

  - *ACM Symposium on InformAtion, Computer and Communications Security (ASIACCS)*, 2010 to present

  - Steering Committee Member, *ACM Symposium on Access Control Models and Technologies (SACMAT)*, 2008 to present

- Program Chair:

  - *2014 ACM Conference on Computer and Communications Security (CCS)*

  - *2013 ACM Symposium on Information, Computer and Communications Security (ASIACCS)*

  - *2009 IFIP WG 11.11 International Conference on Trust Management (IFIPTM)*

  - *2008 ACM Symposium on Access Control Models and Technologies (SACMAT)*

- Track Chair:

  - Security and Privacy track, *2014 International Conference on Data Engineering (ICDE)*

- Security and Privacy track, *2011 World Wide Web Conference (WWW)*
- Security and Privacy track, *2009 World Wide Web Conference (WWW)*
- Other Roles:
  - Workshop Chair, *2011 ACM Conference on Computer and Communications Security (CCS)*
  - Workshop Chair, *2010 ACM Conference on Computer and Communications Security (CCS)*
  - Tutorial Chair, *2009 ACM Conference on Computer and Communications Security (CCS)*
  - Publication Chair, *2006 International Conference on Information and Communications Security (ICICS)*
- Organizing Committee Member, *The Midwest Security Workshop (2006-2008)*
  - Program Chair, the 1st Midwest Security Workshop (May 2006)
  - Local Arrangement Chair, the 3rd Midwest Security Workshop (April 2007)

Program Committee Memberships

2014
- *ACM Conference on Computer and Communications Security (CCS)*
- *IEEE Conference on Data Engineeing (ICDE)*
- *ACM SIGMOD*
- *ACM Symposium on Information, Computer and Communications Security (AsiaCCS)*
- *ACM Symposium on Access Control Models and Technologies (SACMAT)*
- Conference on Principles of Security and Trust (POST)

2013
- *IEEE Symposium on Security and Privacy (SSP)*
- *Network and Distributed Security Symposium (NDSS)*
- *ACM SIGKDD (KDD)*
- *International Conference on Distributed Computing Systems (ICDCS)*
- *ACM Symposium on Information, Computer and Communications Security (AsiaCCS)*
- *Applied Cryptography and Network Security (ACNS)*
- *ACM Symposium on Access Control Models and Technologies (SACMAT)*
- *ACM Conference on Data and Application Security and Privacy (CODASPY)*
- *IEEE Conference on Software Security and Reliability (SERE)*

2012
- *ACM Conference on Computer and Communications Security (CCS)*
- *The World Wide Web Conference (WWW), the Security and Privacy track.*
- *IEEE Symposium on Security and Privacy (SSP)*
- *International Conference on Data Engineering (ICDE)*
- *International Conference on Financial Cryptography and Data Security (FC)*
- *ACM Symposium on Information, Computer and Communications Security (AsiaCCS)*
- *ACM Symposium on Access Control Models and Technologies (SACMAT)*
- *IEEE International Conference on Software Security and Reliability (SERE)*

2011

- *ACM Conference on Computer and Communications Security (CCS)*
- *The World Wide Web Conference (WWW), the Security and Privacy track.*
- *IFIP WG 11.11 International Conference on Trust Management (IFIPTM)*
- *Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD)*
- *ACM Symposium on Access Control Models and Technologies (SACMAT)*
- *Information Security Practice and Experience Conference (ISPEC)*
- International Workshop on Security and Trust Management (STM)

2010

- *The World Wide Web Conference (WWW), the Security and Privacy track.*
- *IFIP WG 11.11 International Conference on Trust Management (IFIPTM)*
- *Applied Cryptography and Network Security Conference (ACNS)*
- *International Conference on Distributed Computing Systems (ICDCS)*
- ACM Workshop on Assurable & Usable Security Configuration (SafeConfig)
- International Workshop on Security and Trust Management (STM)

2009

- *ACM Conference on Computer and Communications Security (CCS)*
- *ACM Symposium on Access Control Models and Technologies (SACMAT)*
- *International Conference on Data Engineering (ICDE)*
- *Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD)*
- *The World Wide Web Conference (WWW), the Security and Privacy track.*
- *Workshop on Assurable and Usable Security Configuration (SafeConfig), in association with ACM CCS*
- *International Conference on Financial Cryptography and Data Security (FC)*
- *IEEE Workshop on Policies in Networks and Distributed Systems (POLICY)*
- *IEEE International Conference on Advanced Information Networking and Applications (AINA)*
- *International Symposium on Stabilization, Safety, and Security of Distributed Systems (SSS-09), the System Safety and Security Track*

2008

- *IEEE Symposium on Security and Privacy (SSP)*
- *ACM Conference on Computer and Communications Security (CCS)*
- *ACM Symposium on Access Control Models and Technologies (SACMAT)*
- *Applied Cryptography and Network Security Conference (ACNS)*
- *International Conference on Financial Cryptography and Data Security (FC)*
- *The Joint iTrust and PST Conferences on Privacy, Trust Management and Security (IFIPTM)*
- *International Conference on Information and Communications Security (ICICS)*
- *Conference on Security and Privacy for Emerging Areas in Communication Networks (SecureComm)*
- *ACM Workshop on Privacy in the Electronic Society (WPES)*
- *ACM Workshop on Scalable Trustworthy Computing (STC)*

- *IEEE/IFIP International Symposium on Trust, Security and Privacy for Pervasive Applications (TSP-08)*
- *International Conference on Provable Security (ProvSec)*
- *International Conference on Availability, Reliability and Security (ARES)*
- *Workshop on Formal Aspects in Security and Trust (FAST)*
- *IEEE International Conference on Sensor Networks, Ubiquitous and Trustworthy Computing (SUTC), the Reliable Software Systems Track*
- *First International Workshop on Security and Privacy in GIS and LBS (SPRINGL2008)*
- *International Workshop on Security and Trust Management (STM)*
- *International Conference on Deontic Logic in Computer Science (DEON)*

2007

- *IEEE Symposium on Security and Privacy (SSP)*
- *The World Wide Web Conference (WWW), the Security, Privacy, Reliability and Ethics (SPRE) track.*
- *ACM Symposium on Access Control Models and Technologies (SACMAT)*
- *IEEE Computer Security Foundations Symposium (CSF)*
- *ACM Symposium on Information, Computer and Communications Security (AsiaCCS)*
- *Asian Computing Conference (ASIAN)*
- *International Symposium on Data, Privacy, and E-Commerce (ISDPE)*
- *IEEE International Workshop on Security in Software Engineering (IWSSE)*
- *Workshop on Software and Application Security: Methodologies, Tools and Practices (WSAS)*
- *International Workshop on Trust, Security and Privacy for Ubiquitous Computing (TSPUC)*

2006

- *ACM Conference on Computer and Communications Security (CCS)*
- *ACM Symposium on Access Control Models and Technologies (SACMAT)*
- *International Conference on Data Engineering (ICDE)*
- *Applied Cryptography and Network Security Conference (ACNS)*
- *Conference on Security and Privacy for Emerging Areas in Communication Networks (SecureComm)*
- *Workshop on Formal Aspects in Security and Trust (FAST)*
- *IEEE Workshop on Policies in Networks and Distributed Systems (POLICY)*
- *International Conference on Trust Management (iTrust)*
- *ACM Workshop on Scalable Trustworthy Computing (STC)*
- *Asian Computing Conference (ASIAN)*
- *Joint Workshop on Foundations of Computer Security and Automated Reasoning for Security Protocol Analysis (FCS-ARSPA)*
- *AusCERT Asia Pacific Information Technology Security Conference Academic Refereed Stream*

2005

- *ACM Conference on Computer and Communications Security (CCS)*
- *Network and Distributed Security Symposium (NDSS)*

- *ACM Symposium on Access Control Models and Technologies (SACMAT)*
- *Conference on Security and Privacy for Emerging Areas in Communication Networks (SecureComm)*
- *IEEE Workshop on Policies in Networks and Distributed Systems (POLICY)*
- *International Conference on Trust Management (iTrust)*
- *Information Security Practice and Experience Conference* (ISPEC)
- *AusCERT Asia Pacific Information Technology Security Conference Academic Refereed Stream*
- *International Conference on Service Oriented Computing (ICSOC)*
- *International Workshop on Information Assurance in Distributed Systems (IADS)*
- *International Workshop on Security in Distributed Computing Systems (SDCS)*

2004

- *ACM Conference on Computer and Communications Security (CCS)*
- *Workshop on Formal Aspects in Security and Trust (FAST)*
- *International Conference on Trust Management (iTrust)*
- *AusCERT Asia Pacific Information Technology Security Conference Academic Refereed Stream*

2003

- *International Conference on Trust Management (iTrust)*

2002

- *IEEE Computer Security Foundations Workshop (CSFW)*

Journal Reviewing

- ACM Transactions on Information and Systems Security (TISSEC)
- Journal of Computer Security (JCS)
- IEEE Transactions on Dependable and Secure Computing (TDSC)
- ACM Transactions on Embedded Computing Systems (TECS)
- ACM Transactions on Internet Technology (TOIT)
- ACM Transactions on the Web (TWEB)
- ACM Computing Surveys
- Information and Computation
- IEEE Journal on Selected Areas in Communications (JSAC)
- IEEE Transactions on Computers (TC)
- IEEE Transactions on Parallel and Distributed Systems (TPDS)
- IEEE Transactions on Knowledge and Data Engineering (TKDE)
- IEEE Transactions on Software Engineering (TSE)
- IEEE Transactions on Systems, Man and Cybernetics
- IEEE Internet Computing
- Journal of Digital Libraries
- Data & Knowledge Engineering
- International Journal of Applied Intelligence

Panel Members, Tutorials, etc.

- NSF Cyber Trust Panel   2005, 2006, 2009, 2010, 2013
- NSF Computing Research Infrastructure Panel   2005
- Give a 5-hour tutorial on "Logic and Logic Programming in Distributed Access Control"
  2nd International Compulog/ALP Summer School in Computational Logic   June 16-17, 2004
- Panel member: Enterprise Privacy Authorization Language
  IAPP/TRUSTe Symposium: Privacy Futures   June 9, 2004

Selected Invited Talks

- "Privacy Notions for Privacy Preserving Microdata Publishing"
  Fifth Annual Security Protocols Workshop, Beijing, China   June 2010
- "A Framework for Privacy Preserving Microdata Publishing"
  U.S.-France Joint Young Engineering Scientists Symposium   June 2009
- "On Privacy-preserving Data Publishing"
  National University of Singapore   July 2008.
- "Access Control in Workflow Authorization Systems"
  Institute for InfoComm Research, Singapore   July 2008
- "Automated Trust Negotiation Using Cryptographic Credentials"
  Institute for InfoComm Research, Singapore   July 2008
- "On Privacy-preserving Data Publishing"
  Hunan University, China   June 2008.
- "Automated Trust Negotiation Using Cryptographic Credentials"
  Shandong University, China   June 2008.
- "On Privacy-preserving Data Publishing"
  Shandong University, China   June 2008.
- "Trojan Horse Resistant Discretionary Access Control"
  Institute of Software, Chinese Academy of Science, China   June 2008
- "A Formal Language for Specifying Policy Combining Algorithms in Access Control"
  University of Texas at San Antonio   May 2008
- "Trojan Horse Resistant Discretionary Access Control" Keynote talk at the 4th International
  Workshop on Security in Systems and Networks (SSN 2008)   March 2008
- "Trojan Horse Resistant Discretionary Access Control"
  Michigan State University   March 2008
- "Trojan Horse Resistant Discretionary Access Control"
  Microsoft Research Redmond Lab,   March 10, 2008
- "Practical Mandatory Integrity Protection for Operating Systems"
  IBM Research,   July 18, 2007
- "Beyond Separation of Duty: An Algebra for Specifying High-Level Security Policies"
  IUPUI   September 15, 2006
- "Policy Verification in Role-Based Access Control"
  University of Texas at San Antonio, Security Seminar.   April 7, 2005
- "Policy Verification in Role-Based Access Control"
  Georgia Institute of Technology, Security Seminar.   March 29, 2005
- "The Bell-LaPadula Model Revisited"
  University of Illinois at Urbana-Champaign, Security Seminar.   March 2, 2005
- "Security Analysis in Access Control"
  North Carolina State University, Computer Science Department Colloquium September 13, 2004

- "A Theory for Comparing the Expressive Power of Access Control Models"
Mathematical Foundations of Programming Semantics (MFPS XX)   May 25, 2004
- "Beyond Proof-of-compliance: Security Analysis in Trust Management"
University of Pennsylvania, Penn Security Seminar   November 7, 2003

Awards

- Purdue University College of Science Graduate Student Mentoring Award   2008
- NSF CAREER Award   2005
- Best paper award, ICICS   2006
- Henry M. MacCracken Fellowship from New York University.   1995 – 1998