

Jianwei Niu, Ph.D.

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(a) PROFESSIONAL PREPARATION

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|------------------------|------------------|------------------|-------|---------|
| Jilin University | Changchun, China | Computer Science | B.S. | 07/1988 |
| University of Waterloo | Waterloo, Canada | Computer Science | Ph.D. | 05/2005 |

(b) APPOINTMENTS

- 09/2012-Present, Associate Professor, Department of Computer Science, University of Texas at San Antonio
- 06/2005-08/2012, Assistant Professor, Department of Computer Science, University of Texas at San Antonio

(c) PUBLICATIONS

(i) MOST SIGNIFICANT PUBLICATIONS

- Slavin, R., Wang, X., Bokaer Hosserni, M., Hester, W., Krishnan, R., Bhatia, J., Breaux, T., & Niu, J. (2016). "Toward a Framework for Detecting Privacy Policy Violation in Android Application Code". *38th ACM/IEEE International Conference on Software Engineering (ICSE)*: pp. 25-36.
- Shen, H., Krishnan, R., Slavin, R., Niu, J. (2016). "Sequence Diagrams Aided Privacy Policy Specification". *IEEE Transactions on Dependable and Secure Computing (TDSC)* 13(3): 381-393.
- Niu, J., Reith, M., Winsborough W.H. (2014). "Formal Verification of Security Properties in Trust Management Policy". *Journal of Computer Security (JCS)* 22(1): 69-153.
- Chowdhury, O., Gampe, A., Niu, J, von Ronne, J., Bennatt, J. Datta, A., Jia, L., & Winsborough, W.H. (2013). "Privacy Promises That Can Be Kept: A Static Policy Analysis Method with Application to the HIPAA Privacy Rules", *18th ACM symposium on Access Control Models and Technologies (SACMAT)*: pp. 3-14.
- Baldor, K., & Niu, J. (2012). "Monitoring Dense-Time, Continuous-Semantics, Metric Temporal Logic". *Lecture Notes in Computer Science, 3rd International Conference on Runtime Verification (RV)*, vol. 7687: pp. 245-259.

(ii) OTHER SIGNIFICANT PUBLICATIONS

- Bokaei Hosseini, M., Wadkar, S., Breaux, T., & Niu, J. (2016). "Lexical Similarity of Information Type Hypernyms, Meronyms and Synonyms in Privacy Policies", *AAAI Fall Symposium on Privacy and Language Technologies*: pp: 231-239.
- Shahen J., Niu J., and Tripunitara M. (2015). "Mohawk+T: Efficient Analysis of Administrative Temporal Role-Based Access Control (ATRBAC) Policies", *20th ACM symposium on Access Control Models and Technologies (SACMAT)*: pp. 15-26. **Best Paper Award Runner-Up.**
- Slavin, R., Lekher, J. M., Niu, J., Breaux, T. D. (2014). "Managing Security Requirements Patterns using Feature Diagram Hierarchies". *22nd IEEE International Requirements Engineering Conference (RE)*: pp. 193-202.
- Chowdhury, O., Pontual, M., Winsborough, W. H., Yu, T., Irwin, K., Niu, J. (2012). "Ensuring Authorization Privileges for Cascading User Obligations". *17th ACM Symposium on Access Control Models and Technologies (SACMAT)*: pp. 33-44. **Best Paper Award.**
- Krishnan, R. N., Niu, J., Sandhu, R., Winsborough, W. H. (2011). "Group-Centric Secure Information Sharing Models for Isolated Groups". *ACM Transactions on Information and System Security (TISSEC) 14(3)*: 23:1-23:29.

(d) **SIGNIFICANT RESEARCH GRANTS AND AWARDS**

- Principal Investigator for UTSA, National Security Agency (through CMU), "Science of Security: Usable Formal Methods for the Design and Composition of Security and Privacy Policies", February 16, 2014 - March 27, 2017, \$220,000.
- Principal Investigator, National Science Foundation grant CNS-0964710, "TC: Medium: Privacy and Declassification Policy Enforcement Framework", September 2011- June 2016, \$1,162,668, Co-PI, Jeffery von Ronne.
July 2010- August 2011, PI, William H. Winsborough, Co-PIs, Jianwei Niu and Jeffery von Ronne.
- Principal Investigator for UTSA, National Security Agency (through CMU), "Improving the Usability of Security Requirements by Software Developers through Empirical Studies and Analysis", January 16, 2012 - September 30, 2014, \$200,000.
- Principal Investigator, Texas Higher Education Coordinating Board (THECB), Norman Hackerman Advanced Research Program (NHARP) grant 010115-0037-2007, "Formal Methods in Access Control Policy Analysis and Design", May 2008 - January 2011, \$145,999. Co-PI, William H. Winsborough.
- Principal Investigator, Microsoft Inc., "VSX: Scenario-Based Model-Driven Engineering Framework", July 2007 - July 2008, \$15,000.

(e) **PH.D. ADVISORS**

I have been the thesis advisor for Kevin Baldor at UTSA 2013 - present
 I have been the thesis advisor for Mitra Bokaei Hosseini at UTSA 2015 - present
 I have been the thesis advisor for John Heaps at UTSA 2017 - present
 I have been the thesis advisor for Rocky Slavin at UTSA 2012 - present

I was the thesis advisor for Omar Chowdhury at UTSA 2011 - 2013
 I was the thesis advisor for Murillo Pontual at UTSA 2011 - 2011
 I was the thesis advisor for Mark Reith at UTSA 2005 - 2009
 I was the thesis advisor for Mark Robinson at UTSA 2009 - 2013
 I was the thesis advisor for Hui Shen at UTSA 2007 - 2013

(f) SYNERGISTIC ACTIVITIES

- Demonstration Chair, ACM Symposium on Access Control Models and Technologies (SACMAT), 2017
- Panels Chair, ACM Symposium on Access Control Models and Technologies (SACMAT), 2016
- Local Arrangements Co-Chair, ACM International Conference on Software Engineering (ICSE), 2016
- Proceedings Chair, ACM Symposium on Access Control Models and Technologies (SACMAT), 2015
- Panelist, National Science Foundation, 2015, 2014, and 2012
- Program Committee Member, ACM Symposium on Access Control Models and Technologies (SACMAT), 2015 and 2014; ACM Symposium on Information, Computer and Communications Security (ASIACCS), 2015; International Conference on Software Engineering and Applications (ICSOFT-EA), 2017, 2016, 2015, 2014 and 2013; International Conference on Software and Data Technologies (ICSOFT), 2012, 2011, 2010, and 2009; IEEE/ACIS International Conference on Computer and Information Science (ICIS), 2013, 2012, 2011, 2010, 2009, and 2008; IEEE International Conference on Software Maintenance, Tool Demo Track, 2009
- Reviewers: Journal of ACM (JACM), Journal of Computer Security (JCS), IEEE Transactions on Dependable and Secure Computing (TDSC), IEEE Transactions on Software Engineering (TSE), IEEE Computer, Journal of Software and System Modeling
- Recipient of **President's Distinguished Achievement Award for Teaching Excellence**, 2009, University of Texas at San Antonio (UTSA)

(f) COLLABORATORS & OTHER AFFILIATIONS (Last Four Years)

| | |
|--------------------|------------------------------------|
| Mark Appleby | University of Texas at San Antonio |
| Jared Bennett | University of Texas at San Antonio |
| Jaspreet Bhatia | Carnegie Mellon University |
| Travis Breaux | Carnegie Mellon University |
| Anupam Datta | Carnegie Mellon University |
| Andreas Gampe | Google Inc. |
| James J. Hester | University of Texas at San Antonio |
| Hanan Hibshi | Carnegie Mellon University |
| Claiborne Johnson | University of Texas at San Antonio |
| Limin Jia | Carnegie Mellon University |
| Yier Jin | University of Central Florida |
| Ram Krishnan | University of Texas at San Antonio |
| Adam Lee | University of Pittsburgh |
| Jean-Michel Lehker | Pandora Inc. |
| Tom MacGahan | University of Texas at San Antonio |
| Xue Qin | University of Texas at San Antonio |
| Ashwini Rao | Carnegie Mellon University |
| Joel Reindenberg | Fordham University |
| Armando Rodriguez | University of Texas at San Antonio |
| Ravi Sandhu | University of Texas at San Antonio |

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|----------------------|------------------------------------|
| Jonathan Shahen | University of Waterloo |
| Macneil Shonle | Google Inc. |
| Mahesh Trinipunitara | University of Waterloo |
| Jeffery von Ronne | University of Texas at San Antonio |
| Sudarshan Wadkar | Carnegie Mellon University |
| Xiaoyin Wang | University of Texas at San Antonio |
| Laurie Williams | North Carolina State University |
| Wenyuan Xu | University of South Carolina |
| Xiaoguang Zhang | Morgan Stanley |