

Lei Zhang

CONTACT INFORMATION	Center for Secure Information Systems The George Mason University MSN 5B5 4400 University Drive Fairfax, VA 22030, USA	<i>Tel:</i> (571) 338-5517 <i>Fax:</i> (703) 993-4776 <i>E-mail:</i> lzhang8@gmu.edu <i>Homepage:</i> http://mason.gmu.edu/~lzhang8
CITIZENSHIP	P.R.CHINA	
RESEARCH INTERESTS	Database Security & Privacy, Network Security	
EDUCATION	The George Mason University , Fairfax, Virginia USA Ph.D., Information Technology (expected graduation date: June 2010) <ul style="list-style-type: none">• Thesis Topic: Secure Information Sharing• Advisor: Professor Sushil Jajodia, Professor Alexander Brodsky• Area of Study: Information Security The Tsinghua University , Beijing, CHINA M.E., Computer Science and Engineering (June 2004) <ul style="list-style-type: none">• Thesis Topic: Network Security Protocols Design & Authentication• Advisor: Professor Liansheng Huang• Area of Study: Network Security B.S., Computer Science and Engineering (June 2001)	
AWARDS	The George Mason University <ul style="list-style-type: none">• Graduate Research Endowed Assistantship, 2007-2009• Vision Award for Academic Excellence, 2007• High Potential Graduate Research Assistantship, 2004-2007 The Tsinghua University <ul style="list-style-type: none">• Graduate Student Award for Academic Excellence, 2003• Graduate Student Award for Excellence in Social Practice, 2002	
PUBLICATIONS (AS A PH.D. STUDENT)	Conference <ol style="list-style-type: none">1. Information disclosure under realistic assumptions: Privacy versus Optimality Lei Zhang, Sushil Jajodia, Alexander Brodsky Proc. <i>14th ACM Conf. on Computer and Communications Security (CCS)</i>, 20072. A Framework for Maximizing Utility of Sanitized Documents Based on Meta-labeling Lei Zhang, Alexander Brodsky, Vipin Swarup, Sushil Jajodia Proc. <i>9th IEEE policy</i>, 20083. Exclusive Strategy for Generalization Algorithms in Micro-Data Disclosure Lei Zhang, Lingyu Wang, Sushil Jajodia, Alexander Brodsky Proc. <i>22nd IFIP WG 11.3 Working Conf. on Data and Applications Security</i>, 20084. Toward information sharing: benefit and risk access control (BARAC) Lei Zhang, Alexander Brodsky, Sushil Jajodia Proc. <i>7th IEEE Policy 2006</i>	

5. An Integrity Lock Architecture for Supporting Distributed Authorizations in Database Federations
Wei Li, Lingyu Wang, Bo Zhu, and **Lei Zhang**
Proc. *IFIP SEC 2008*

Journal

6. Privacy-preserving robust data aggregation in wireless sensor networks
Mauro Conti, **Lei Zhang**, Sankardas Roy, Roberto Di Pietro, Sushil Jajodia, Luigi V. Mancini
Security and Communication Networks 2(2): 195-213 (2009)
7. Two secret sharing schemes based on Boolean operations
Daoshun Wang, **Lei Zhang**, Ning Ma, Xiaobo Li
Pattern Recognition, Volume 40, Issue 10(2776-2785), October, 2007

Workshop

8. L-Cover: Preserving Diversity by Anonymity
Lei Zhang, Lingyu Wang, Sushil Jajodia, Alexander Brodsky
Proc. *6th VLDB workshop on Secure Data Management 2009*: 158-171
9. Simulatable Binding: Beyond Simulatable Auditing
Lei Zhang, Sushil Jajodia, Alexander Brodsky
Proc. *5th VLDB workshop on Secure Data Management 2008*: 16-31
10. Answering queries based on imprecision and uncertainty trade-offs in numeric databases
Alexander Brodsky, **Lei Zhang**, Sushil Jajodia
Proc. *4th VLDB workshop on Secure Data Management 2007*: 81-95

PUBLICATIONS (AS A MASTER STUDENT)

11. Layer-based Model for Security Protocol Authentication
Lei Zhang, Junfeng Hou, Liansheng Huang
Journal of Application Research of Computers (in Chinese). 2005.7.
12. A new formal verification method of security protocols
Junfeng Hou, **Lei Zhang**, Liansheng Huang
Journal of Computer Research and Development (in Chinese), 2004.8.
13. Evaluation based on invisible watermarking system
Daoshun Wang, Jinghong Liang, **Lei Zhang**, Yiqi Dai
Proc. *SPIE* (Volume 5241), 202-210, November 2003
14. An improved formal model and algorithm for verifying network protocols
Tian Sang, **Lei Zhang**, Liansheng Huang
Tsinghua Science & Technology, 2002.1.
15. Abstract authentication method of network protocols
Lei Zhang, Tian Sang, Liansheng Huang, Xinbing Wang
Journal of Computer Research and Development (in Chinese), 2001.8.

ACADEMIC EXPERIENCE

The George Mason University

Research Assistant

September 2004 to June 2010

- Participated in the Center for Secure Information Systems.
- Researched in inference prevention when different strategies are selected for information disclosure.
- Researched also in privacy-preserving data aggregations in wireless sensor network.

Microsoft Research Asia, Beijing, CHINA

Visiting Student

Feb 2004 to May 2004

- Participated in Portable Device Security Group
- Research in privacy protection for portable device when they can be possibly lost.

The Tsinghua University, Beijing, CHINA

Teaching Assistant

September 2002 to March 2004

- Assisted [Analysis of Algorithm Complexity](#).
- Provided in-class support to first-year master students majored in computer science and engineering.
- Constructed supporting software, designed and graded midterm/final, graded daily assignments.

Teaching Assistant

September 2002 to March 2004

- Assisted [Combinatorics](#).
- Provided in-class support to first-year master students majored in computer science and engineering.
- Graded midterm/final and daily assignments.

Research Assistant

September 2001 to June 2004

- Participated in the [Network Security Lab](#).
- Researched design and authentication of network security protocols.