

XIN HU

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OBJECTIVE

Computer Scientist with expertise in research of computer and network security, developing novel solutions and applications for real world security problems.

EDUCATION

May 2007 — Present

Ph.D. candidate in the Computer Science and Engineering
University of Michigan, Ann Arbor, Michigan, USA

September 2005 — April 2007

Master of Science in Computer Science and Engineering
GPA: 8.529/9.0 (8.0 = A, 9.0 = A⁺)
University of Michigan, Ann Arbor, Michigan, USA

September 2001 — June 2005

Bachelor of Engineering in Computer Science
GPA: 3.94/4.0 (91.56/100); Rank: top 3% in 585 students
Zhejiang University, Zhejiang Province, P.R. China

HONORS AND AWARDS

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| 2008 | • 2nd place in Symantec Intern Research/Project Competition, |
| 2008 | • Mobisys 2008 Travel Award, 2008 |
| 2007 | • IEEE Security and Privacy (Oakland) Student Travel Grant |
| 2006 | • 1st place in Windows CE Shared Source Contest, a national competition sponsored by Microsoft and WindowsForDevices.com |
| 2005 | • Honored Graduate of the Zhejiang University, P.R. China |
| | • Honored Graduate of Zhejiang Province, P.R.China |
| 2004 | • Xin Yada Scholarship, Zhejiang University (15 out of 6000 students each year) |
| 2002-2004 | • First Class Excellent Student Scholarship (top 3%) |

PUBLICATION

- **RB-Seeker: Automatic Detection of Redirection Botnets**

Xin Hu, Matt Knysz, Kang G. Shin

To appear in Proceedings of the 16th Annual Network and Distributed System Security Symposium (NDSS'09), 2009

- **Containment of Network Worms by Per-Process Rate-Limiting**
Yuanyuan Zeng, Xin Hu, Abhijit Bose, Haixiong Wang, Kang G. Shin
Proceedings of the 4th International Conference on Security and Privacy in Communication Networks (SecureCom'08) 2008
- **Behavioral Detection of Malware on Mobile Handsets**
Abhijit Bose, Xin Hu, Kang G. Shin and Taejoon Park
Proceedings of ACM/Usenix Mobisys 2008
- **Attack-Tolerant Time-Synchronization in Wireless Sensor Networks**
Xin Hu, Taejoon Park and Kang G. Shin
Proceedings of IEEE INFOCOM 2008
- **Wide-Area IP Network Mobility**
Xin Hu, Li Li, Z. Morley Mao, and Yang Richard Yang
Proceedings of IEEE INFOCOM 2008.
- **Accurate Real-time Identification of IP Prefix Hijacking**
Xin Hu and Z. Morley Mao
Proceedings of IEEE Symposium on Security and Privacy (Oakland) 2007

EXPERIENCE

- 05/2008 - present **Intern** in Symantec Research Lab, Symantec Corporation
- Focus on malware reverse engineering and automatic string signature generation (the Project Hancock).
 - Design algorithms to improve anti-virus signature generation by leveraging instruction-level information
 - Design algorithms for automatic malware organization and database Indexing based on call graphs
 - Automatic reverse engineering of Botnet Command and Control protocol
- 01/2006 - present **Research Assistant** in RTCL Lab, University of Michigan
- RB-Seeker: Automatic detection of redirection botnets
 - Behavioral malware detection system on mobile handsets
 - Internet worm analysis and containment through per-process rate limiting
 - Design and implementation of smart cameras for smart conference rooms (Windows CE Contest project)
 - Attack-tolerant time synchronization protocol for wireless sensor networks
 - Design and development of a real-time detection system of IP prefix hijacking attacks
- 09/2004 - 06/2005 **Research Assistant** in AI center, Zhejiang University
- Developed a graphic library and a software platform for reconstructing NURBS curves and surfaces to facilitate hair modeling
- 06/2003 - 09/2004 **Research Assistant** in Embedded System Lab, Zhejiang University
- Worked in BREW Core Develop Group, designing and implementing Rapid

Application Development Framework for BREW environment including
BREW Socket Module, BREW Extension Library and BREW Middleware

08/2003 - 01/2004 **Software Engineer Intern** in Hangzhou Pingzhi Information Corporation, China

- Designed and developed two games (published by China Unicom Company)
on CDMA mobile phones

09/2002 - 07/2003 **Teaching Assistant** in Mathematical Analysis