

Youngsang Shin

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- Objective** Seeking a research and development position in network security and analysis with areas of interest that include network-based attacks, botnet, malware, and secure communication for mobile computing.
- Education**
- Indiana University**, Bloomington, Indiana
Ph.D. candidate in Computer Science, Currently
- University of Wisconsin**, Madison, Wisconsin
M.S. in Computer Science, May 2004
- Pusan National University**, Busan, Korea
M.E. in Computer Engineering, February 2000
B.E. in Computer Engineering, February 1998 (ranked 2nd out of 63)
- Publications**
- Youngsang Shin**, Steven Myers, Minaxi Gupta, “*A Case Study on Asprox Infection Dynamics*,” Proceedings of GI International Conference on Detection of Intrusions and Malware & Vulnerability (DIMVA), July 2009.
- Youngsang Shin**, Minaxi Gupta, Steven Myers, “*A Study of the Performance of SSL on PDAs*,” Proceedings of IEEE INFOCOM Global Internet Symposium (GI), April 2009.
- Youngsang Shin**, Minaxi Gupta, Rob Henderson, Aaron Emigh, “*Separating Wheat from the Chaff: A Deployable Approach to Counter Spam*,” Proceedings of the 2nd USENIX Workshop on Steps to Reducing Unwanted Traffic on the Internet (SRUTI), July 2006.
- Craig Shue, **Youngsang Shin**, Minaxi Gupta, Jong Youl Choi, “*Analysis of IPSec Overheads for VPN Servers*,” Proceedings of the 1st IEEE ICNP Workshop on Secure Network Protocols (NPsec), November 2005.
- Youngsang Shin**, Bong-Hee Hong, “*Concurrency Control and Consistency Maintenance of Cached Spatial Data in Client-Server Environment*,” Journal of the Korea Information Science Society: Databases Vol. 28, Num. 3, September 2001.
- Bonggi Jun, Sungwoo An, **Youngsang Shin**, Bong-Hee Hong, “*Design and Implementation of System for Mobile Map Service*,” Proceedings of Mobile Multimedia Terminal Technology Workshop, 2001.
- Jinoh Choi, **Youngsang Shin**, Bong-Hee Hong, “*Update Propagation of Replicated Data in Distributed Spatial Database*,” Lecture Notes in Computer Science 1677, 10th International Conference on DEXA '99, pp. 952-963, 1999.
- Youngsang Shin**, Jinoh Choi, Daesoo Cho, Bong-Hee Hong, “*Concurrency and Consistency Control of Spatial Data in Client-Side Update Transactions*,” Proceedings of the 26st Korea Information Science Society Fall Conference, 1999.
- Youngsang Shin**, Jinoh Choi, Bong-Hee Hong, “*Update Propagation of Cached Spatial Data in Client-Server Environment*,” Proceedings of the 26st Korea Information Science Society Spring Conference, 1999.

Academic Experience

Research

Indiana University

Bloomington, Indiana

Conducted research on malware infection dynamics, the mobility and power saving for IPsec in mobile devices, evaluating the performance of SSL in PDAs, and an intrusion detection system based on behavior alert approach under the direction of Professor Minaxi Gupta and Professor Steven Myers.

Research Assistant

August 2005 – Present

May 2005 – August 2005

Researched on type inferencing to translate Matlab scripts to C/C++ codes as a part of *ParaM* project under the direction of Professor Arun Chauhan.

University of Wisconsin

Madison, Wisconsin

Conducted research on efficient maintenance of semi-structured data, *ClassAds* in relational database and XML for *Condor* project under the direction of Professor Jeffrey Naughton and Professor Miron Livny.

Research Assistant

September 2003 – June 2004

Computer Engineering Department, Pusan National University

Busan, Korea

Researched spatial operators for *Geospatial-SQL* and spatial query processing; developed Open GIS APIs based on CORBA and desktop GIS software using them.

Research Assistant

March 1998 – February 2000

Teaching

Indiana University

Bloomington, Indiana

Algorithms Design and Analysis, Introduction to Computer & Computing.

Associate Instructor

January 2005 – Present

University of Wisconsin

Madison, Wisconsin

Introduction to Operating Systems.

Teaching Assistant

January 2003 – May 2003

Reviewer

IEEE INFOCOM Conference, 2008, 2009; ACM CCS, 2008, 2009; Workshop on Secure Network Protocols (NPsec), 2009; International Conference on Pervasive Computing Technologies for Healthcare (Pervasive Health), 2009; IEEE International Conference on Computer Communications and Networks (ICCCN), 2008, 2009; IEEE Workshop on Local and Metropolitan Area Networks (LANMAN), 2008; The 13th International Conference on Parallel and Distributed Systems (ICPADS), 2007; Second SKLOIS Conference on Information Security and Cryptology (INSCRYPT), 2006.

Professional Experience

CyberMapWorld Co., Ltd.

Busan, Korea

Developed storage, indexing, and synchronization modules of mobile GIS client on PDA in *Mobile CyberMap* project; researched and developed a concurrent client-server spatial database system in *OnLine Map Editor* project; designed and implemented a communication module and a spatial indexing engine of the Internet GIS server in *CyberMap* project.

Research Staff

March 2000 – June 2001

Hanjin Information Systems & Telecommunication Co., Ltd.

Seoul, Korea

Taught *GeoMedia* developer course.

Lectureship

August 1999

Intergraph Korea Ltd.

Seoul, Korea

Developed interoperable OpenGIS data provider for *MGE* based on *MS OLE DB*.

Research Intern

August 1998 – August 1999

Honors and Awards

- CACR fellow, The Center for Applied Cybersecurity Research, Indiana University, 2009–2010.
- Departmental Fellowship, Computer Science Dept., Indiana University, 2004–2009.
- Information and Telecommunication National Scholarship, Ministry of Information and Communication, Korea, 2001-2004.
- Best Paper Prize, Korea Information Science Society, Korea, April 2000.
- Department Merit-based Scholarship, Pusan National University, Korea, 1991 - 2000.

Technical Skills

Languages: C/C++, Java, Python, JavaScript, HTML/CSS, XML, SQL

Platforms: Linux, UNIX, Mac OS X, Microsoft Windows, Microsoft Windows Mobile

Databases: PostgreSQL, Berkeley DB/DB XML, Oracle

GIS Software: Gothic, Oracle Spatial Cartridge, GeoMedia

References

Available upon request.