

# Shu, Anhei (Ian)

## About

I am a PhD student in [Computer Science Department](#) at [Rice University](#), and a member of the [Computer Security Lab](#). This is my second year in the doctoral program. My advisor is Professor [Dan Wallach](#).

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## Research Interests

- Network and Web Security
- Android Security
- Parallel Computing
- Web Information Retrieval
- Natural Language Processing



## Projects

### Machine Learning

Digital Forensics

### Computer Systems Security

[Quiltwork Project Home](#)

[My Quiltwork Home](#)

- References
  - [Lobo Java Web Browser](#)
  - [Rivest's S-expression](#)

### Distributed Systems

Distributed Queues Design and Implementation

### Computer Systems Architecture

Implementation of Tomasulo processor

### Computer Networks

Implementation of Intra-domain Routing

Implementation of Inter-domain Routing

## Small tools I developed

- [MySQL huge dump file splitter](#)

## My Technical Memo





These notes are mainly for my personal use purposes. Any reliance you place on such information is strictly at your own risk.

- Mac
  - CJK on Wine
  - XeTeX for Chinese on iMac
  - VirtualBox
    - VirtualBox on iMac
    - Boot from bootable USB drive in VirtualBox
- Eclipse Tips
- Ubuntu 9.10 setting logs and tips
  - VMWare Server 2.0
  - Multiple Boot Systems Time Conflicts
- Ubuntu tips
  - Run a second chromium browser?
  - "ALERT: /dev/disk/by-uuid/... does not exist" after upgrade from Lucid(10.04) to Maverick(10.10)
  - Given a file, find out the package it belongs to
  - Rename multiple files
  - Magic SysRq keys Alt-SysRq-RSEIUB
  - Use at as an alarm clock
- Debian
  - How to reset root password in Debian
  - Debian on Intel-based iMac 27" (64 bit)
    - Graphics and sound
    - Flash Player
    - Network unreachable in java only
  - How to move minimize, maximize, close button to left hand side or right hand side of title bar on Ubuntu or Debian
- MySQL
  - MySQL
  - Make LOAD DATA INFILE run even faster for a MyISAM table
  - MySQL5.1 on Ubuntu 10.10 installation log
- Others
  - Firefox extension compatibility

## Teaching Assistantships

- COMP/ELEC 421 Operating Systems and Concurrent Programming
- COMP 482 / ELEC 420 Design and Analysis of Algorithms, Class OWL-Space(login required)
- COMP 529 Computer Network Protocols and Systems, Class OWL-Space(login required)
- COMP 430 Introduction to Database Systems

## Courses I have taken or am taking at Rice Univ.

### Spring 12

- COMP 540 STATISTICAL MACHINE LEARNING

### Fall 11

- STAT 640 DATA MINING AND STATISTICAL LEARNING

### Spring 11

- COMP 481 AUTOMATA/FORMAL LAN/COMPUTABLE
- COMP 600 GRADUATE SEMINAR
- COMP 800 GRADUATE RESEARCH

### Fall 10

- COMP 425 COMPUTER SYSTEMS ARCHITECTURE

- [COMP 571 BIOINFORMATICS: SEQUENCE](#)
- [COMP 590 COMPUTER SCIENCE PROJECTS](#)
- [COMP 600 GRADUATE SEMINAR](#)
- [COMP 800 GRADUATE RESEARCH](#)
- [STAT 280 ELEMENTARY APPLIED STATISTICS](#)

## Spring 10

- [COMP 429 INTRO TO COMPUTER NETWORKS](#)
- [COMP 430 INTRO TO DATABASE SYSTEMS](#)
- [COMP 520 DISTRIBUTED SYSTEMS](#)
- [COMP 620 GRAD SEM-DISTRIBUTED COMPUTING](#)
- [COMP 600 GRADUATE SEMINAR](#)
- [COMP 800 GRADUATE RESEARCH](#)

## Fall 09

- [COMP 527 Computer Systems Security](#)
- [COMP 482 Design and Analysis of Algorithms](#) and [yahoo group for COMP 482](#)
- [COMP 600 GRADUATE SEMINAR](#)
- [COMP 800 GRADUATE RESEARCH](#)

## Publications

- Peiyong Song, Anhei Shu, David Phipps, Dan Wallach, Mohit Tiwari, Jedidiah Crandall, George Luger. Language Without Words: A Pointillist Model for Natural Language Processing. SCIS-ISIS 2012, Kobe, Japan, September 2012
- Peiyong Song, Anhei Shu, Anyu Zhou, Dan Wallach, Jedidiah R. Crandall. A Pointillist Approach of Natural Language Processing. 2012 IEEE International Conference on Natural Language Processing and Knowledge Engineering (IEEE NLP-KE'12), Hefei, China. August 2012. **Best Paper Award.**
- Michael Dietz, Shashi Shekhar, Yuliy Pisetsky, Anhei Shu, and Dan S. Wallach. Quire: Lightweight Provenance for Smartphone Operating Systems, 21st USENIX Security Symposium (San Francisco, CA), August 2011.
- Anhei Shu, Kumiko Tanaka. Omniget: A Browselet in Browser Interface to Provide Third Party Information While Browsing. In the 14th Conference on Natural Language Processing in Japan, 2008. Japan
- Haruhara Masato, Anhei Shu. OMJ: OpenMP Compiler with Software DSM JIAJIA for PC Cluster. The Conference of the Institute of Electronics, Information and Communication Engineers, 2004, No. D-6-7, (2004). Japan
- Anyu Zhou, Hongli Zhang, Mingzeng Hu, Anhei Shu. Light Vertex Matching Scheme in k-way Partitioning for Network Graphs. Journal of Jiamusi University, 2006, 24 (2): 177-181. China

## Education

- Ph.D. Student, Rice University, Houston, TX Aug, 2009 ~ Present
  - Concentration: Computer systems and network security
  - Supervisor: Dan Wallach (Computer security lab)
  - Major GPA: 3.98/4.0
  - Projects: Android system security
- Ph.D. Student, University of Tokyo, Tokyo, Japan Apr, 2007 ~ July, 2009
  - Concentration: Natural Language Processing
  - Major GPA: 4.0/4.0
  - Projects:
    - Omniget - A generalized interface framework for providing third-party information while browsing web documents
    - Pinyomi-lite - A light weight dictionary look-up system for learning Chinese and Japanese using logograph transliteration.
- Master of Science Degree in Computer Science, University of Elector-Communications, Tokyo, Japan, 2003
  - Concentration: Parallel and distributed processing
  - Major GPA: 3.78/4.0
  - Thesis: OOJ - Omni OpenMP Compiler on JIAJIA
- Bachelor of Science Degree in Information and Network Science, Chiba Institute of Technology, Chiba, Japan 2001
  - Concentration: Computer network system

- Major GPA: 3.7/4.0
- Thesis: Keyword Spotting for Speech Verification by Continuous Dynamic Programming Algorithm

## Working Experience and Internship

- Web System Developing Team Leader, [KSK Inc.](#), Tokyo May 2005 ~ Mar 2008
- System Administrator, [Tokyo University of Foreign Studies](#), Tokyo Jan 2004 ~ May 2005
- System Engineer in Technical Support Systems Engineering Div. [Sun Microsystems, Inc.](#) Tokyo Apr 2003 ~ Jan 2004
- Hardware Engineer, Arc Design, Inc., Tokyo 2002 ~ 2003
- Web Application Development Programmer, [Digital Knowledge, Inc.](#), Tokyo 2001 ~ 2002
- System Engineer, [Transware, Inc.](#), Tokyo 1999 ~ 2001
- Program development team leader, Synthesize, Inc., Tokyo 1998 ~ 1999

## Licenses/Certifications

- JNCIA-EX (Juniper Networks Certified Internet Associate), Juniper Networks, Inc. 2008
- CCNA (Cisco Certified Network Associate) 2005
- SCSA (Sun Certified System Administrator for Solaris 9) 2004
- Certified Class II Information Technology Engineer, JIPDEC 1998

## Selected Awards

- Scholarship of Funai Information Science Foundation, Japan 2001-2003
- Full scholarship of Chiba Institute of Technology, Japan 1997-2001
- Olympic Candidate of Information Science of China 1996
- Awards on information science(twice), physics(twice), mathematics(once), chemistry(once) international contests.(China) 1993 – 1996

## Links

- [Useful Links](#)

## Personal

- Xun
- Cooking
- Snowboarding
- My family