

Lihua Yuan

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Objective

A research position that can use and enhance my research capability.

Education

- PhD Candidate, Research Assistant*, Universities of California, Davis Sep 03 — Present
Associated with Networks lab and RUBINET group.
GPA 3.9/4.0
- Master of Engineering*, National University of Singapore Jul 00 — Jul 03
Thesis: “Bandwidth Broker for Advance Resource Reservation in DiffServ Networks”
GPA 4.0/4.0
- Bachelor of Engineering (Honors)*, Nanyang Technological University Jul 95 — May 99
Thesis: “Study of Traffic Management Issues in ATM Networks”
GPA 3.4/4.0

Professional Experience

- Software Engineering Intern*, Google Inc. Jun 07 — Sep 07
- Research and development of a platform for routing anomaly detection.
- Research Intern*, Fujitsu Lab of America Jun 04 — Aug 04
- Conducted research on applying signal processing techniques for network anomaly detection.
- Research Engineer*, National University of Singapore Jul 00 — Jul 03
- Investigator of the Internet 2 QBone Project sponsored by SingAREN.
 - Deployed a QoS and bandwidth broker Testbed.
 - Conducted research on measurement-based admission control and policy-based network management.
 - Cooperated with Singapore Telecom in IP DPT Ring for Next Generation Internet project.
- Test Engineer*, Hewlett-Packard/Agilent Technologies Jul 99 — Jun 00
- Developed test methodologies for various optical network products, including ATM and Gigabit Ethernet modules.
 - Administrator of department HP-UX, Linux and network.
 - Received Performance Recognition Award 1999.
- Programmer (Part-time)*, Port of Singapore Authority Nov 98 — May 99
- Developed a distributed warehouse management program in C and Java.
- Intern* Keppel Communications Pte Ltd. Jan 98 — Jun 98
- Design, deployment and performance test of CDMA indoor micro-cells for a major service provider.

Publications

1. L. Yuan, C.-N. Chuah, and P. Mohapatra, "ProgME: Towards Programmable Network MEasurement" in *Proceedings of ACM SIGCOMM*, Kyoto, Japan, Aug 2007.
2. L. Yuan, K. Kant, C.-N. Chuah, and P. Mohapatra, "A Proxy View of Quality of Domain Name Service" in *Proceedings of IEEE INFOCOM*, Anchorage, Alaska, May 2007.
3. L. Yuan, J. Mai, Z. Su, H. Chen, C.-N. Chuah and P. Mohapatra, "FIREMAN: A Toolkit for FIREwall Modeling and ANalysis," in *Proceedings of IEEE Security & Privacy*, Oakland, CA, May 2006.
4. L. Yuan, K. Kant, P. Mohapatra, and C.-N. Chuah, "DoX: A Peer-to-Peer Antidote for DNS Cache Poisoning Attacks," in *Proceedings of IEEE ICC*, Istanbul, Turkey, Jun 2006.
5. Z. Li, L. Yuan, P. Mohapatra, and C.-N. Chuah, "On The Analysis of Overlay Failure Detection and Recovery," in *Elsevier Computer Networks* (To Appear).
6. Z. Li, L. Yuan, and P. Mohapatra, "An Efficient Overlay Link Performance Monitoring Technique," in *Proceedings of IFIP Networking*, Coimbra, Portugal, May 2006.
7. L. Yuan, J. Mai, and C.-N. Chuah, "BGP Anomaly Detection Using Wavelet Analysis," *Technical Report ECE-CE-2004-4*, Computer Engineering Research Laboratory, University of California, Davis, 2004.
7. L. Yuan, C. Gui, C.-N. Chuah, and P. Mohapatra, "Applications and Design for Heterogeneous and/or Broadband Sensor Networks," in *Proceedings of IEEE First Workshop on Broadband Advanced Sensor Networks (Basenets)*, Oct 2004 (invited paper).
8. L. Yuan, C.-K. Tham, and A. L. Ananda, "A Probing Approach for Effective Distributed Resource Reservation," in *Proceedings of the Second International Workshop on Quality of Service in Multiservice IP Networks (QoS-IP)*, LNCS, Milano, Italy, Feb. 2003.
9. C.-H. Ng, L. Yuan, W. Fu, and L. Zhang, "Methodology for Traffic Modeling Using Two-State Markov-Modulated Bernoulli Process," *Journal on Computer Communications*, 1999.

Patent and Awards

- ProgME: A Programmable Network Measurement Architecture (Patent Pending)
- CITRIS Fellowship, 2005 – 2006
- Summer Graduate Student Researcher Award, 2005
- USENIX NSDI Student Travel Grant, 2006
- ICNP Student Travel Grant, 2005
- BROADNET Student Travel Grant, 2004

Skills and Qualifications

Network Administration:	Cisco Certified Network Associate (CCNA), Zebra
System Administration:	HP-UX (certified training), Linux, Windows
Programming:	Python, C/C++, Tcl, Java, Basic
Simulation:	NS-2, Java-Sim
Languages:	Chinese, English, Japanese

References (Additional references available upon request)

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