

Oliver Ao-Jan Su

Curriculum Vitae

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RESEARCH INTEREST

Computer Networking with emphasis on Internet measurements, content distribution networks (CDN), data center networks (DCN) and denial-of-service resiliency.

EDUCATION

Ph.D. candidate, Electrical Engineering and Computer Science, Current
NORTHWESTERN UNIVERSITY
Aleksandar Kuzmanovic, advisor.

Master of Science Computer Science, January 2002
NEW YORK UNIVERSITY.

Bachelor of Science Computer Science, June 1998
NATIONAL TSING HUA UNIVERSITY, TAIWAN.

PROFESSIONAL EXPERIENCE

Research Assistant, DEPARTMENT OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCE, NORTHWESTERN UNIVERSITY, 2007 - Present.

- Monitor real-time traffic of Apache web servers.
- Evaluate denial-of-service resiliency on DNS-driven streaming networks.
- Design and implement CDN-based network positioning system.
- Investigate how overlay networks can reuse measurements collected by CDNs.

Research Intern, NEC LABS, AMERICA, INC. PRINCETON, NJ, June 2009 - September 2009.

- Evaluate FatTree and FiConn DCN architectures in virtualized environments.
- Supervisor: Dr. Yueping Zhang.

Research Assistant, KELLOGG BUSSINESS SCHOOL, NORTHWESTERN UNIVERSITY, May 2008 - March 2009.

- Analyze interorganizational relations for individual firms.
- Supervisor: Prof. Maxim Sytch.

Teaching Assistant, DEPARTMENT OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCE, NORTHWESTERN UNIVERSITY, 2006 - 2007.

- Consult undergraduate engineering students on courses of computer networking, computer programming and machine learning.
- Mentor undergraduate students on multiple projects in advanced computer networking.

Software Architect, YAHOO! INC., 2003 - 2005.

- Design and implement bill pay system.
- Architect and engineer a system-wide click abuse defense system.

Research Assistant, ACADEMIC SINICA, TAIWAN, 2002 - 2003.

- Develop the inter process communication system in NCTU-ns network simulator.

OTHER WORK EXPERIENCE

Second Lieutenant, R.O.C. ARMY, TAIWAN, 1998-2000.

PUBLICATIONS

1. Yueping Zhang, Ao-Jan Su and Guofei Jiang, "Evaluating the Impact of Data Center Network Architectures on Application Performance in Virtualized Environments," under submission.
2. Ao-Jan Su, David R. Choffnes, Aleksandar Kuzmanovic and Fabián E. Bustamante, "Drafting Behind Akamai: Inferring Network Conditions Based on CDN Redirections," in *ACM/IEEE Transactions on Networking (17) 6*, December 2009.
3. Ao-Jan Su and Aleksandar Kuzmanovic, "Thinning Akamai," in *Proceedings of USENIX / ACM SIGCOMM Internet Measurement Conference (IMC'08)*, Vouliagmeni, Greece, October 2008. (14 pages, 17% acceptance rate, 32/185)
4. Ao-Jan Su, David R. Choffnes, Fabián E. Bustamant and Aleksandar Kuzmanovic, "Relative Network Positioning via CDN Redirections," in *Proceedings of IEEE International Conference on Distributed Computing Systems (ICDCS'08)*, Beijing, China, June 2008. (10 pages, 16% acceptance rate, 102/638)
5. Ao-Jan Su, David R. Choffnes, Aleksandar Kuzmanovic and Fabián E. Bustamante, "Drafting Behind Akamai (Travelocity-Based Detouring)," in *Proceedings of ACM SIGCOMM'06*, Pisa, Italy, September 2006. (12 pages, 10% acceptance rate, 37/340)
6. Shie-Yuan Wang, Ao-Jan Su, Kuo-Chiang Liao, Hsi-Yun Chen, and Meng-Chen Yu, "NCTUns 1.0 GUI User Manual," 2002.
7. Von-Wun Soo, Tung-Ing Chiang and Ao-Jan Su, "Carcinogenesis Prediction Using Evolutionary Approaches," *The Fourth Annual Meeting and the Recent Advances of Biophysics, 1998*.

TALKS

SIGCOMM IMC 2008, "Thinning Akamai," Vouliagmeni, Greece, October 2008.

ICDCS 2008, "Relative Network Positioning via CDN Redirections," Beijing, China, June 2008.

SIGCOMM 2006, "Drafting Behind Akamai (Travelocity-Based Detouring)," Pisa, Italy, September 2006.

REFERENCES

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