

Curriculum Vitae

Hiroshi Fujinoki
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PROFESSIONAL EXPERIENCE

8/01 to present	Southern Illinois University Edwardsville – Edwardsville, IL Assistant Professor in Department of Computer Science – teaching graduate and under-graduate courses in introductory and advanced computer networks, computer architecture and operating systems.
9/96 – 7/01	University of South Florida – Tampa, FL Graduate Teaching Assistant in Department of Computer Science - taught undergraduate networks operating systems and assembly programming.
5/95 – 8/95	Hannme Software – Seoul, KOREA Technical Researcher – conducted research for Microsoft IME (Input Method Editor) to support a trilingual word processor (Chinese, Japanese and Korean) and developed a technical reference document for the trilingual word processor project.
4/91 – 3/94	Sophia Preparatory School – Saitama, JAPAN Senior Instructor – taught mathematics and science for high-school graduates in preparing for entrance exams for universities.

EDUCATION

- Ph.D. in Computer Science – August 2001; University of South Florida; Dissertation title: “Performance Evaluation of Multicast Routing Algorithms to Trade-off Path Length and Bandwidth Consumption and of a protocol to reduce Messaging Overhead” (GPA: 3.62 of 4.00)
- M.S. in Computer Science – May 1995; Illinois Institute of Technology (GPA 4.00 of 4.00)
- B.A. in Economics – March 1991; Meiji University (Tokyo/JAPAN) (GPA: 3.15 of 4.00)

RECENT PUBLICATIONS

- H. Fujinoki and K. Christensen, "The New Shortest Best Path Tree (SBPT) Algorithm for Dynamic Multicast Trees," *Proceedings of the IEEE 24th Conference on Local Computer Networks*, pp. 204-211, October 1999, Boston, Massachusetts.
- H. Fujinoki and K. Christensen, "A Routing Algorithm for Dynamic Multicast Trees with End-to-End Path Length Control," *Computer Communications*, Vol. 23, No. 2, pp. 101-114, 2000.

- H. Fujinoki and K. Christensen, "The Directed Reverse Path Join (DRPJ) Protocol: An Efficient Multicast Routing Protocol," *Computer Communications*, Vol. 24, No. 12, pp. 1121-1133, 2001.
- H. Fujinoki, K. Christensen, and D. Rundus, "Propensity Analysis as a Means of Evaluating the Effectiveness of an Educational Method without Requiring a Random Control Group," *Proceedings of ASEE Southeastern Regional Conference* Charleston, SC in April 2001.
- D. Panchal, K. Schuh and H. Fujinoki, "On the Degree of Multicast Bandwidth Sharing in Existing Internet Routing," *Proceedings of the 16th International Workshop on Communications Quality and Reliability (IEEE CQR) 2002*, pp. 187-191, Okinawa, JAPAN.
- H. Fujinoki and K. Gollamudi, "Web Transmission Delay Improvement for Slow and Busy Web Servers," *Proceedings of the IEEE 27th Conference on Local Computer Networks* pp. 345-347, Tampa, Florida, October 2002.
- K. Christensen, D. Rundus, H. Fujinoki, and D. Davis, "A Crash Course for Preparing Students for a First Course in Computing: Did it Work?," *ASEE Journal of Engineering Education*, Vol. 91, No. 4, pp. 409-413, October 2002.
- Hiroshi Fujinoki, Murugesan Sanjay, and Chintan Shah, "Web File Transmission by Object Packaging - Performance Comparison with HTTP 1.0 and HTTP 1.1 Persistent Connection," *Proceedings of the IEEE 28th Conference on Local Computer Networks*, pp. 71-80, October 2003, Bonn/Konigswinter, Germany.
- A. K. Pandey and H. Fujinoki, "Study of MANET Routing Protocols by GloMoSim Simulator," *International Journal of Network Management 2005*, no. 15, pp.393-410.
- Kevin L. Nilson, Sreekanth Peyyeti and Hiroshi Fujinoki, "An Efficient Load Balancing Algorithm for Web Server Clusters: MOLL (Migration-Optimized Least Loaded) Load-Balancing Algorithm", *Proceedings of Networks and Communication Systems (NCS)*, April 18-20, 2005, Krabi, Thailand.
- Hiroshi Fujinoki, "Cached Guaranteed-Timer Random-Drop against TCP SYN-flood Attacks and Flash Crowds," *Proceedings of the IASTED International Conference on Communication, Network, and Information Security*, pp. 162-169, November 14-16, 2005, Phoenix, Arizona.
- Y. Guo and H. Fujinoki, "Tree-based Server-Middleman-Client Architecture: Improving Scalability and Reliability for Voting-based Network Games in Ad-Hoc Wireless Networks," *Proceedings of SPIE, Multimedia Systems and Applications IX*, Vol. 6391, 63910I-1 – 63910I11, October 2-3, 2006, Boston, Massachusetts, USA.
- Ravi Kumar Boyapati and Hiroshi Fujinoki, "Performance Studies of the Server-Side Access Control for SYN-Flooding Distributed Denial of Service Attacks using Real Systems," *Proceedings of the IASTED International Conference on Communication, Network, and Information Security*, October 2006, MIT Cambridge, Massachusetts.

- Hiroshi Fujinoki, “On the Support for Heterogeneity in Networked Virtual Environment,” *Proceedings of ACM 5th Workshop on Network & System Support for Games 2006*, October 30-31, 2006, Singapore.

SCHOLRAY ACTIVITIES

- **Conference Session Chair.** Contributed to *Networks and Communication Systems (NCS)* Conference, April 18-20, 2005, Krabi, Thailand as a session chair.
- **Conference Session Chair (for two sessions).** Contributed to *Communication, Network, and Information Security (CNIS)* Conference, November 14-16, 2005, Phoenix, Arizona as a session chair for two conference sessions.
- **International Program Committee.** Invited as an IPC by *Communication, Network, and Information Security (CNIS)* Conference, (to be held at Boston, MA) 2006.
- **Technical Program Committee.** Invited as a TPC by *ACM NetGames 2006 Workshop*, (to be held at Singapore) 2006.
- **Journal Reviewer.** Reviewed journal papers for *the Institute of Electrical, Information and Computer Engineering (IEICE)*. Since 2003.

GRANTS

- SIUE Summer Research Fellowship, “An Innovative Internet Routing Method for Real-Time Applications”, Summer 2002. \$6,000.
- SIUE Summer Research Fellowship, “Examining Network Load Reduction by Multicast Data Transmissions”, Summer 2003. \$6,000.
- SIUE Excellence in Graduate Education, “Developing a project-oriented graduate level course on wireless networks for Spring 2007”, April 2006, \$3,000.
- SIUE Excellence in Undergraduate Education, “Develop Network Security Labs and Open Seminars as a part of CS 490 Network Security Course”, April 2007, \$4,000