

JOSEPH SPADAVECCHIA

Contact Information

Room 2.15 Appleton Tower
Crichton Street
Edinburgh, EH8 9LE
United Kingdom

Phone: +44 (0)131-650-5187
E-mail: j.spadavecchia@ed.ac.uk
Web: homepages.inf.ed.ac.uk/s0239160

Interests

P2P Systems, Databases and Operating Systems; Parallel and Distributed Systems; Distributed Randomised Algorithms; Probabilistic Analysis.

Education

THE UNIVERSITY OF EDINBURGH Edinburgh, UK
School of Informatics, Laboratory for Foundations of Computer Science
PhD Candidate, Computer Science (October 2002-Present)

- Member of: Database Group
- Thesis Topic: "New methods for indexing in structured peer-to-peer (P2P) systems."
- Adviser: Stratis Viglas

STATE UNIVERSITY OF NEW YORK AT STONY BROOK Stony Brook, NY
Department of Computer Science
Two years of PhD Program (September 2000-2002)

POLYTECHNIC UNIVERSITY Brooklyn, NY
Department of Computer Science
B.S. Computer Science, June 2000, Dean's List

Honours

Polytechnic University: Myron M. Rosenthal Award, Honours in Computer Science, 2000
Polytechnic University: Raytheon Special Service Award, Tutoring, 2000

Special Experience

FILE SYSTEMS AND STORAGE LABORATORY Stony Brook, NY
Research Assistant: June, 2001 - May, 2002
Conducted research aimed at improving the access model of NFS (Network File System) under Linux. This work involved heavy kernel programming, performance evaluation, and writing technical literature. Worked on the CoSy (Compound System Call) project, which focused on improving the performance of long-running applications by transparently executing their code in kernel-mode. This project also investigated some zero-copy techniques.

C-SCAPE CONSULTING CORPORATION Merrick, NY
Software Engineer: May, 2000 - September, 2000
Developed a Linux device driver for a disk controller that performs transparent data compression. Worked on a Windows NT device driver for a data acquisition card.

Experience

STATE UNIVERSITY OF NEW YORK AT STONY BROOK Stony Brook, NY
International Consultant: May, 2002 - Present
The Njal Supercomputer Cluster: <http://njal.physics.sunysb.edu>. Funded by the Department of Physics.

THE UNIVERSITY OF EDINBURGH Edinburgh, UK
Consultant: July, 2003 - January, 2004
Installed the Gladiator Beowulf cluster: <http://gladiator.see.ed.ac.uk>. Responsible for the system design, installation, trouble-shooting and fine-tuning. This was a short-term project funded by the Department of Chemical Engineering.

THE UNIVERSITY OF EDINBURGH Edinburgh, UK
Teaching Assistant: October, 2002 - August, 2003
Assisted in the organisation of an introductory level computer science course: discrete math, algorithms and data structures, and object oriented programming. Taught tutorials (recitations), worked on lecture notes, handouts, exams, and assisted with grading.

EDINBURGH PARALLEL COMPUTING CENTER (EPCC) Edinburgh, UK
Overseas Summer Programme: June, 2002 - October, 2002
Worked as a software engineer on an IT project and took part in some JavaGrande research, concerned with improving the scalability of Java.

STATE UNIVERSITY OF NEW YORK AT STONY BROOK Stony Brook, NY
Teaching Assistant: September, 2000 - May, 2002
Taught recitations and one lecture for an introductory course in discrete mathematics. Was a teaching assistant for the graduate course in operating systems: graded homework, exams, helped organise the course, and gave a lecture.

APPLIED VISIONS INCORPORATED Northport, NY
Software Engineer Intern: May, 1999 - November, 2000
Worked on the ECRPM (Electronic Customer Relations and Project Management) project. Worked heavily with JavaScript, ASP, DAO, LDAP and Microsoft SQL server. (www.avi.com)

PHOTOCIRCUITS CORPORATION Glen Cove, NY
Software Engineer Intern: May, 1998 - May, 1999
Perl programmer; wrote corporate intranet proposal tracking system.

Publications

A. Purohit and C. Wright and J. Spadavecchia and E. Zadok. Cosy: Develop in User-Land, Run in Kernel-Mode. In *9th Workshop on Hot Topics in Operating Systems*, May 2003.

J. Spadavecchia and E. Zadok. Enhancing NFS Cross-Administrative Domain Access. *Usenix Technical Conference, FreeNIX Track*, June 2002.

Technical Reports

A. Purohit and J. Spadavecchia and C. Wright and E. Zadok. Improving Application Performance Through System Call Composition. *SUNY Stony Brook: FSL-02-01*, June 2002.

Talks and Presentations

"Supporting Relational Queries in Peer-to-Peer Systems", May 20th, 2004, The University of Edinburgh, Informatics Jamboree, Edinburgh, UK.

"Semantic Routing in Peer-to-Peer Overlay Networks", October 23th, 2003, The University of Edinburgh, ICSA Graduate Seminar Series, Edinburgh, UK.

"Enhancing NFS Cross-Administrative Domain Access", June 14th, 2002, USENIX Technical Conference FreeNIX Track, Monterey, California.

Professional Activities

External referee for the 2002 *USENIX Technical Conference*.

Wrote paper reviews for USENIX magazine (Login;), 2001 technical conference edition.