

FRANK UYEDA

Computer Science & Engineering Department
University of California, San Diego
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Research Interests

Computer Networking, Distributed Systems, Peer-to-peer Technologies

Education

UNIVERSITY OF CALIFORNIA, SAN DIEGO
Ph.D. in Computer Science, (expected) June 2010.
M.S. in Computer Science, June 2006.
B.S. in Computer Engineering, June 2004.

Honors

Cal-(IT)² Undergraduate Scholar, 2004.
BAE Systems Undergraduate Scholarship Recipient, 2004.
Summa Cum Laude, 2004.
Provost's Honors, 2000-2004.
Tau Beta Pi Engineering Honor Society, 2003-2004.

Research Experience

U.C. San Diego

La Jolla, CA

September 2005 – present

Graduate Student Researcher, Department of Computer Science and Engineering
Advisor: Prof. Amin Vahdat & Prof. George Varghese

July 2004 – September 2005

Graduate Student Researcher, Department of Computer Science and Engineering
Advisor: Prof. Andrew Chien

January 2004 – June 2004

Undergraduate Independent Research, Department of Computer Science and Engineering
Advisor: Prof. Andrew Chien

Microsoft Research

Cambridge, UK

June 2007 – September 2007

Research Intern, Systems and Networking Group
Advisor: Dr. Antony Rowstron

Microsoft Research

Redmond, WA

June 2006 – September 2006

Research Intern, Systems and Networking Group
Advisor: Dr. John Douceur

Projects

GrassRoots – Tools to Specify and Build Community-Driven Web Sites.

GateKeeper – Allowing Streaming Overlays to Adapt to Aggregate Available Upload Bandwidth

DonnyBrook – Scaling Multiplayer Games

Arkose – Content Distribution using Network Coding

OptIPuter Project / Master's Thesis –

A Comparison of Models of Use for Dynamically Configurable Optical Networks

OptIPuter Project / RobuStore – Implementing and optimizing an erasure coding algorithm.

Technical Papers

Frank Uyeda, Diwaker Gupta, Amin Vahdat, George Varghese, *GrassRoots: Socially-Driven Web Sites for the Masses*, To appear at the 2nd Workshop on Online Social Networks (WOSN), Barcelona, Spain, August 2009.

Simon Schubert, Frank Uyeda, Nedeljko Vasic, Naveen Cherukuri, Dejan Kostic, Antony Rowstron, *Bandwidth Adaptation in Streaming Overlays*, EPFL Technical Report, NSL-REPORT-2008-003.

John Douceur, Jacob Lorch, Frank Uyeda, Randall Wood, *Enhancing Game-Server AI with Distributed Client Computation*, In Proceedings of the 17th International Workshop on Network and Operating Systems Support for Digital Audio and Video (NOSSDAV), pages 31-36, Urbana, IL, June 2007

Jeffrey Pang, Frank Uyeda, and Jacob Lorch, *Scaling Peer-to-Peer Games in Low-Bandwidth Environments*, In Proceedings of the 6th International Workshop on Peer-to-Peer Systems (IPTPS 2007), Bellevue, WA, February 2007

Nut Taesombut, Frank Uyeda, Andrew Chien, *The OptIPuter: High Performance, QoS-Guaranteed Network Service for Emerging E-Science Applications*, IEEE Communications Magazine, Vol 44(5), Pages 38-45, May 2006.

Frank Uyeda, Huaxia Xia, Andrew Chien, *Evaluation of a High Performance Erasure Code Implementation*, UCSD Technical Report CS2004-0798.

Teaching Experience

U.C. San Diego

La Jolla, CA

Instructor – *Principals of Computer Operating Systems* (CSE 120), Summer 2009.

Course Tutor – *Advanced Data Structures* (CSE100), Spring 2004.

Course Tutor – *Basic Data Structures and Object Oriented Design* (CSE12), Spring 2002.