

SHAHIN SHAYANDEH

1220 W. 28th St., Los Angeles, CA 90007

(213)880-3043; shayande@usc.edu

Education

University of Southern California—Los Angeles, CA

Ph.D. in Computer Science

Jan. 2006 – present

- Adviser: Professor Shahram Gahndeharizadeh
- URL: <http://dmlab.usc.edu/shahin>
- Projected Graduation Date: January, 2010

M.Sc. in Computer Science

Jan. 2006 – present

- Current GPA: 4.0/4.0
- Projected Graduation Date: May, 2007

Sharif University of Technology—Tehran, Iran

B.Sc. in Computer Engineering (with distinction)

Sep. 2000 – Jan. 2005

- GPA: 17.3/20.0
- Concentration: Software Engineering

Honors and Awards

- Awarded USC tuition scholarship, Jan. 2006 – present
- Recipient of "Ahura Scholarship", Fall 2006
- Recipient of "Queen's University Graduate Award", Fall 2005
- Ranked 19th in the Iranian National M.Sc. Entrance Exam (Konkour) for Master of Business Administration, Summer 2004
- Ranked 5th among the 85 computer engineering students in my class, Sharif University of Technology, Spring 2004
- Ranked 168th among 450,000 contestants in the Iranian National B.Sc. Entrance Exam (Konkour), Summer 2000

Research Interest

My research is focused on Multimedia Information Systems. I am particularly interested in various issues arising in design and implementation of a multimedia streaming system over ad hoc network of wireless devices, including:

- Online Data Placement and Replication
- Cooperative Cache Management
- Distributed Admission Control

Work Experience

Research Assistant Jan. 2006 - present
Professor Shahram Ghandeharizadeh, Database Systems Laboratory, University of Southern California, CA

- Design and Development of data replication algorithms for H2O framework
- Design and Simulation analysis of novel cooperative caching algorithms for ad hoc wireless networks
- Development of H2OSim, A simulator resembling H2O framework

Research Assistant Aug. 2005 - Dec. 2005
Professor Mohammad Zulkernine, Reliable Software Technology Group, Queen's University, ON, Canada

- Designing an intelligent system for network intrusion detection
- Designing a distributed intrusion detection system using mobile agents

Research Assistant Feb. 2005 - Jul. 2005
Professor Hamid R. Rabiee, Digital Media Laboratory, Sharif University of Technology, Tehran, Iran

- Design and development of an enhanced overlay architecture for multimedia streaming over the Internet
- Design and simulation analysis of a new congestion control protocol for video streaming using NS2

Research Assistant Jun. 2004 - Jan. 2005
Professor Mansour Jamzad, RoboCup Research Laboratory, Sharif University of Technology, Tehran, Iran

- Design and development of a human follower robot

Teaching Experience

Teaching Assistant 2006,2007
File and Database Management, Object Oriented Programming(Java), University of Southern California, CA

- Lectured in review sessions, mentored lab sessions, held office hours, designed labs, and prepared course materials.

Teaching Assistant Fall 2005
Artificial Intelligence, Queen's University, ON, Canada

- Lectured in review sessions, held office hours, and graded assignments and exams.

Instructor Fall 2004
Network Simulation with NS2, Sharif University of Technology, Tehran, Iran

- Designed and instructed a semester-length course focused on network simulation using NS2.

Teaching Assistant 2003,2004
Computer Networks, Advanced programming languages(C++), Sharif University of Technology, Tehran, Iran

- Lectured in review sessions, and graded exams.

Publications

S. Ghandeharizadeh and S. *Shayandeh*, "Greedy Cache Management Techniques for Mobile Devices," to appear, International Workshop on Ambient Intelligence, Media, and Sensing, April 2007.

S. Ghandeharizadeh, T. Helmi, T. Jung, S. Kapadia, and S. *Shayandeh*, "An Evaluation of Two Policies for Simple Placement of Continuous Media in Multi-hop Wireless Networks," In Twelfth International Conference on Distributed Multimedia Systems, August 2006.

S. Ghandeharizadeh and S. *Shayandeh*, "A Comparison of Alternative Continuous Media Caching Strategies for Ad Hoc Network of Wireless Devices," submitted to, ACM SIGCOMM 2007 Data Communications Festival.

S. *Shayandeh* and R. Sherafat, "Congestion Control of Video Stream Multicasting in Overlay Networks," Bachelor of science thesis, Department of Computer Engineering, Sharif University of Technology, July 2004.

Skills

Programming Languages

- C, C++, C#, Java, Perl, SQL, Prolog, MATLAB, Verilog HDL

Web Development

- J2EE, JSP, Java Servlets, Java Applets, PHP, HTML

Database Management Systems

- PostgreSQL, MySQL, Oracle 10g

Simulation Environments

- Network Simulator 2 (NS2), OMNeT++

Operating Systems

- Linux/Unix, Windows