Omid Mashayekhi

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Education

Stanford University (expected graduation: June 2017) — Stanford, CA
Ph.D. in Electrical Engineering, Cloud Computing — Winter 2013 - Present
Ph.D. Minor in Computer Science, Systems Track — Winter 2013 - Present
M.Sc. in Electrical Engineering, Networking Systems — Fall 2011 - Spring 2013

Sharif University of Technology — Tehran, Iran
B.Sc. in Electrical Engineering, Communication Systems — Fall 2007 - Spring 2011

Experience

Internship at bebop Inc. — Los Altos, CA
Back-end engineer working on developing a low latency data store. — Summer 2015

RA at Stanford Information Networks Group (SING) — Stanford University
Diverse projects from cloud computing and graphical simulations to full duplex radio. — Fall 2011 - Present

Internship at Cisco Systems — San Jose, CA
Software engineer at Wireless Networking Business Unit (WNBU). — Summer 2012

Teaching Experience — Stanford University
Course Assistant in CS344C, Cloud Simulation Systems. — Spring 2013

RA at Advanced Communications Research Institute (ACRI) — Sharif University
Research in power estimation and coding techniques for CDMA systems — Spring 2009 - Summer 2011

Selected Projects

Nimbus: cloud computing framework for fast data analytics and HPC applications. (nimbus.stanford.edu).

Janus: centralized MAC protocol for full duplex radio that realizes double capacity.

Predicting x86 Runtime: supervised learning algorithms to predict serialized x86 programs runtime.

Packet Classification in Presence of Wildcard: scalable, memory efficient, software-based algorithm.

OpenFlow Controller for DCell: simulating DCell topology for data centers using Mininet OpenFlow controller.

Papers

O. Mashayekhi, H. Qu, C. Shah, P. Levis "Scalable, Fast Cloud Computing with Execution Templates", arXiv:1606.01972 [cs.DC], 2016

O. Mashayekhi, C. Shah, H. Qu, P. Levis "Distributed Graphical Simulation in the Cloud", arXiv:1606.01966 [cs.DC], 2016

H. Qu, **O. Mashayekhi**, D. Terei, P. Levis, "Canary: A Scheduling Architecture for High Performance Cloud Computing", Stanford CSTR 2016-01, 2016.

J. Y. Kim, **O. Mashayekhi**, H. Qu, M. Kazandjieva, and P. Levis, "Janus: A Novel MAC Protocol for Full Duplex Radio", Stanford CSTR 2013-02, 2013.

O. Mashayekhi, and F. Marvasti, "Uniquely Decodable Codes with Fast Decoder for Overloaded Synchronous CDMA Systems", *IEEE Transactions on Communication*, vol. 60, no. 11, pp. 3145-3149, November 2012.

Patents

O. Mashayekhi, and F. Marvasti, "Uniquely Decodable Codes and Decoder for Overloaded Synchronous CDMA Systems", U.S. patent application no. 13,082,084, April 7/2011.

Computer Skills

Programming Languages: C++, C, Java, Python, JavaScript, Shell script, Ruby, PHP, Assembly.

Systems and Softwares: Apache Spark, Naiad, Mininet, MATLAB, MATHCAD

Honors and Awards

- Recipient of 2-year **Stanford Graduate Fellowship** (Cisco Systems Fellow) *2013-2015*
- **Ranked 15$^{\mathbf{th}}$**(/135) in the EE Qualifying Examination, Stanford University. *Winter 2013*
- **Ranked 2$^{\mathbf{nd}}$** in the EE Depart., Comm. branch, Sharif University of Technology. *Class 2007-2011*
- **Second Winner** of the "Bests Undergraduate Thesis Award", Sharif University of Technology. *2011*
- **Bronze** medalist of Iran National Mathematics Olympiad. *2006*
- **Ranked 46$^{\mathbf{th}}$** in university entrance exam among more than 300,000 students. *2007*
- Member of the "Iranian National Elite Foundation". *2007-2011*

Extracurricular Activities

Social Ballroom Dancing, Playing Tennis, Golfing, Swimming, Travelling.