

# POOYAN BEHNAMGHADER

Department of Computer Science, University of Southern California  
941 Bloom Walk (SAL 339), USC, LA, CA 90089-0781, USA

[behnamghader.net](http://behnamghader.net)  
pbehnamg@usc.edu

## RESEARCH INTERESTS

---

- ◆ Software Architecture Recovery, Software Repository Mining
- ◆ Distributed Systems, Cloud Computing

## EDUCATION

---

### PhD Student, Computer Science

Fall 2013 – Present

- ◆ University of Southern California, Los Angeles, CA, U.S.A.
  - Advisor: Professor Nenad Medvidović

### Bachelor of Science, Computer Engineering

Fall 2008 – Spring 2013

- ◆ University of Tehran, Tehran, Iran
  - GPA: 18.42 (of 20)    Ranked 1<sup>st</sup>

### Diploma, Mathematics and Physics

Fall 2004 – Spring 2008

- ◆ Allameh-Helli, Tehran, Iran
  - GPA: 19.53 (of 20)

## RESEARCH EXPERIENCES

---

### Department of Computer Science, University of Southern California, USA

#### ◆ Research Assistant of Prof. N. Medvidović

Fall 2013 – Present

- Extending and improving ARCADE, a software workbench that employs a suite of architecture-recovery techniques and metrics for different aspects of architectural change
- Developing a toolset to use cloud computing in order to semi-automatically run large-scale software architecture recovery analyses on the history of systems in software repositories
- Improving Mahjong, a distributed software system that uses idle cycles on remote but networked computers to solve NP-complete problems

### School of Computer and Communication Science, EPFL, Switzerland

#### ◆ Research Assistant of Prof. C. Petitpierre

Summer 2012

- Developing a DSL using Xtext framework for generating Android Interfaces
- Developing a compiler using Xtext for compiling Xtend templates
- Developing a parser using JavaCC parser generator for parsing Xtext files

### School of Electrical and Computer Engineering, University of Tehran, Iran

#### ◆ Research Assistant of Dr. F. Ghassemi

Fall 2012 – Summer 2013

- Providing a state space generator for process terms of Restricted Broadcast Process Theory (RBPT) extended with abstract data types, a formal framework for specification and verification of Mobile Ad-hoc Networks, by translating the specifications to ML

### School of Mechanical Engineering, University of Tehran, Iran

#### ◆ Research Assistant of Prof. M. Raisee

Summer 2011 – Fall 2012

- Developing numerical solvers using OpenFoam CFD software package for the problem of “*Fluid Dynamics Modeling of Advanced Oxidation Process in UV-H<sub>2</sub>O<sub>2</sub> Photoreactors*”

**NOTABLE HONORS AND AWARDS**

---

- ◆ **Provost's PhD Fellowship** for four years from the **University of Southern California** 2013
  - Also offered fellowships and/or research assistantships from UT Austin, U Illinois, Georgia Tech, UC San Diego, U Toronto, and EPFL
- ◆ Winner of the **Faculty of Engineering (FOE)** from the University of Tehran 2012
- ◆ Accepted into the **EPFL** competitive internship program granted with full scholarship 2012
- ◆ **Ranked 3<sup>rd</sup>** in the 16<sup>th</sup> Iran National **University Students' Olympiad** in Computer Eng. 2011
  - Member of Iran's **National Elites Foundation** and received multiple grants
  - Qualified to pursue graduate studies in **any Iranian university** with full scholarship
- ◆ **11<sup>th</sup> Place** in the 12<sup>th</sup> Regional Contest of **ACM ICPC** in Asia region, Tehran site 2010
- ◆ **Top 0.1%** of the nationwide entrance exam of Iranian universities 2008
  - Received a **Faculty of Engineering Scholarship** as an exceptional student

**PUBLICATIONS**

---

- ◆ Sonal Mahajan, Bailan Li, **Pooyan Behnamghader**, William G. J. Halfond. "Using Visual Symptoms for Debugging Presentation Failures in Web Applications." In Proceedings of the 9th IEEE International Conference on Software Testing, Verification and Validation (ICST 2016), Chicago, USA, April 2016.
- ◆ Duc Le\*, **Pooyan Behnamghader\*** (co-first author), Joshua Garcia, Daniel Link, Arman Shahbazian and Nenad Medvidovic. "An Empirical Study of Architectural Change in Open-Source Software Systems." In *Proceedings of the 12th Working Conference on Mining Software Repositories (MSR 2015)*, Florence, Italy, May 2015.

**TEACHING EXPERIENCES**

---

**School of Electrical and Computer Engineering, University of Tehran, Iran**

- ◆ **Teaching Assistant** in the following courses:
  - System Analysis and Design Spring 2012, Spring 2013
  - Software Engineering Fall 2012
  - Programming Languages Fall 2012
  - Design and Analysis of Algorithms Spring 2012
  - Advance Programming Fall 2009

**ACTIVITIES**

---

**Department of Computer Science, University of Southern California, USA**

- ◆ Board Member (President): **PhD Student Committee** Fall 2015 – Present
- ◆ Board Member (Officer): **PhD Student Committee** Spring 2014 – Spring 2015

**Thornton School of Music, University of Southern California, USA**

- ◆ Singer: **Apollo Men's Chorus** Fall 2014 – Spring 2015

**School of Electrical and Computer Engineering, University of Tehran, Iran**

- ◆ Board Member (Secretary): **ACM Student Chapter** Fall 2010 – Spring 2011
- ◆ Board Member (Secretary): **Representatives Community** Spring 2009 – Spring 2010