

## Pooyan Behnamghader

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	Ph.D. Student Department of Computer Science University of Southern California	<i>Updated:</i> July 10, 2016 <i>E-mail:</i> pbehnamg@usc.edu <i>WWW:</i> <a href="http://www.behnamghader.net">www.behnamghader.net</a>
RESEARCH INTERESTS	Software Architecture Recovery, Software Repository Mining Cloud-Based Microservices, (Mobile) Backend as a Service	
EDUCATION	<b>University of Southern California</b> , Los Angeles, CA USA Ph.D. Student, Computer Science • Research Topic: “Cloud-Based Software Architecture Analysis” • Advisor: Nenad Medvidovic <b>University of Tehran</b> , Tehran, Iran B.S., Computer Engineering • GPA: 18.42 (of 20)   Ranked 1 <sup>st</sup> in class of 103 • Advisor: Fatemeh Ghassemi	
HONORS AND AWARDS	Recipient of USC Provost's Ph.D. Fellowship Also offered fellowships and/or research assistantships from U Illinois, UT Austin, Georgia Tech, UC San Diego, U Toronto, and EPFL Recipient of Summer@EPFL Scholarship Ranked 3 <sup>rd</sup> in the 16 <sup>th</sup> Annual Iran National University Students' Olympiad in Computer Eng. Qualified to pursue graduate studies in any Iranian university with scholarship Member of Iran's National Elites Foundation and received multiple grants Ranked 11 <sup>th</sup> in the 12 <sup>th</sup> Annual Regional Contest of ACM ICPC in Asia region, Tehran Iran Member of University of Tehran's ACM ICPC team in 2009 and 2010	
JOURNAL PUBLICATIONS	<b>Pooyan Behnamghader</b> , Duc Le, Joshua Garcia, Daniel Link, Arman Shahbazian and Nenad Medvidovic. “A Large-Scale Study of Architectural Evolution in Open-Source Software Systems.” Journal of Empirical Software Engineering. (accepted subject to minor revisions.)	
CONFERENCE PUBLICATIONS	Sonal Mahajan, Bailan Li, <b>Pooyan Behnamghader</b> , 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 Minh Le*, <b>Pooyan Behnamghader*</b> (co-first author), Joshua Garcia, Daniel Link, Arman Shahbazian, and Nenad Medvidovic. 2015. “An Empirical Study of Architectural Change in Open-Source Software Systems”. In Proceedings of the 12th Working Conference on Mining Software Repositories (MSR '15). IEEE Press, Piscataway, NJ, USA, 235-245.	
ACADEMIC EXPERIENCE	<b>Department of Computer Science, University of Southern California, USA</b> <i>Doctoral Student</i> under supervision of Dr. N. Medvidovic • Developing a tool-set to use cloud computing in order to semi-automatically run large-scale evolution analyses on the history of systems in software repositories. • Extended and improved ARCADE, a software workbench that employs a suite of architecture-recovery techniques and metrics for different aspects of architectural change. • Improved Mahjong, a distributed software system that uses idle cycles on remote but networked computers to solve NP-complete problems.	

	<p><b>Department of Informatics, University of Zurich, Switzerland</b>  <i>Visiting Doctoral Student</i> under supervision of Dr. H. Gall May - Sept. 2015</p> <ul style="list-style-type: none"> <li>• Studied scalability, re-usability, and reliability of empirical studies in software engineering.</li> <li>• Studied architecture-centric benchmarking of Infrastructure As A Service (IaaS) and Mobile Backend As A Service (MBaaS).</li> </ul>
	<p><b>School of Computer and Communication Science, EPFL, Switzerland</b>  <i>Undergraduate Research Assistant</i> of Dr. C. Petitpierre May - Aug. 2012</p> <ul style="list-style-type: none"> <li>• Developed a DSL using Xtext framework for generating Android Interfaces.</li> <li>• Developed a compiler using Xtext for compiling Xtend templates.</li> <li>• Developed a parser using JavaCC parser generator for parsing Xtext files.</li> </ul>
	<p><b>School of Electrical and Computer Engineering, University of Tehran, Iran</b>  <i>Undergraduate Research Assistant</i> of Dr. F. Ghassemi Sept. 2012 - May 2013</p> <ul style="list-style-type: none"> <li>• Provided 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.</li> </ul> <p><i>Undergraduate Teaching Assistant</i> Sept. 2011 - May 2013</p> <ul style="list-style-type: none"> <li>• Design and Analysis of Algorithms (head-TA), System Analysis and Design (head-TA)</li> <li>• Software Engineering, Programming Languages, Advance Programming</li> </ul> <p><i>Undergraduate Research Assistant</i> of Dr. M. Raisee May - Dec. 2011</p> <ul style="list-style-type: none"> <li>• Developed 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.</li> </ul>
STARTUP EXPERIENCE	<p><b>AmberMelon Smart Watch, Los Angeles, California USA</b>  <i>Co-founder and Technical Lead</i> Sept. 2015 - May 2016</p> <ul style="list-style-type: none"> <li>• Developed a customize Android launcher application.</li> <li>• Developed a cloud-based server-less platform for AmberMelon on Amazon AWS.</li> <li>• Leded Android and iOS mobile app development teams.</li> <li>• Partnered with Qualcomm, Pegatron, Ingenic, and Compal.</li> </ul>
	<p><b>Huntus Sharing Economy Platform, Los Angeles, California USA</b>  <i>Co-founder and Technical Lead</i> Feb. 2015 - Mar. 2016</p> <ul style="list-style-type: none"> <li>• Developed a cross platform application using Xamarin.</li> <li>• Developed a cloud-based back-end on Microsoft Azure.</li> </ul>
	<p><b>Basir Tech., Tehran, Iran</b>  <i>Computer Vision Developer</i> May - Sept. 2007</p> <ul style="list-style-type: none"> <li>• Developed computer vision techniques based on neural networks for license plate recognition.</li> </ul>
LEADERSHIP EXPERIENCE	<p><b>Department of Computer Science University of Southern California, USA</b>  <i>President</i> of the Computer Science PhD Student Committee Aug. 2015 - May 2016  <i>Board Member</i> of the Computer Science PhD Student Committee Jan. 2014 - Jul. 2015</p>
	<p><b>School of Electrical and Computer Engineering, University of Tehran, Iran</b>  <i>Secretary</i> of the ACM Student Chapter Aug. 2010 - Jul. 2011</p> <ul style="list-style-type: none"> <li>• Four times recipient of world's top-five ACM Student Chapter Excellence Award since 2011.</li> </ul> <p><i>Secretary</i> of the Representatives Community Jul. 2009 - May 2010</p>
	<p><b>AREAS OF EXPERTISE</b></p> <p><b>Software Platform:</b> Android Open Source Platform, Android Application Framework  <b>Cloud Platform:</b> Amazon Web Services, Microsoft Azure  <b>Mathematics:</b> Algorithms and Data Structures, Graph Theory, Set Theory  <b>Open Source Contributions:</b> RBPT (founder), SoftEvo (founder), ARCADE (major), Mahjong</p>