Negar Ghorbani

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Education	**University of California, Irvine,** Ph.D. Candidate in Software Engineering, Jun 2021 Donald Bren School of Information and Computer Science GPA: 3.98/4
	Sharif University of Technology, B.S. in Computer Engineering, Jun 2016 Department of Computer Engineering

Work Experience

Software Engineering and Analysis Lab (SEAL)   Sep 2016 - present
Graduate Research Assistant, Under supervision of Dr. Sam Malek and Dr. Joshua Garcia
University of California, Irvine

- Darcy:Detection and Repair of Architectural Inconsistencies in Java
- Terminator:A Temporal Permission Analysis and Enforcement Framework for Android
- LetterBomb:Automatic Generation of Inter-Component Communication Exploits for Android Applications

Fujitsu Laboratories of America, Sunnyvale, CA   Jun - Sep 2020
Software Engineering Research Intern

- Mining and fixing software bugs using crowd intelligence and unsupervised machine learning

Morgan Stanley, New York, NY   Jun - Sep 2019
Software Engineering Intern

- Designing and developing dynamic and static optimization methods in a framework for distributed and parallelized graph based calculations in Scala.

Institute for Studies in Theoretical Physics and Mathematics (IPM)
Research Assistant   Jun 2015 - Jul 2016

- Multi-Cloud TCPN: Modeling and Evaluation of Service Composition in Commercial Multi-Clouds using Timed Colored Petri Nets

Pishtazan Andishe Pouya, Tehran, Iran   Jan - Jul 2016
Software Engineering Intern

- Design and analysis of models for software information systems and web applications.

VADA Future Communications,Tehran, Iran   Jan - Dec 2014
Software Developer

- Designed, developed, and maintained mobile and web applications.

Technology Skills

- Programming Languages: Java, Python, Android, Matlab, SQL
  Familiar with: Scala, C, C++, Prolog, Verilog
- Software Engineering: Program Analysis, Software Testing, Software Architecture, Agile, Scrum, Object Oriented Design Patterns
- Web Development: Django, HTML, CSS, Javascript, JQuery, AngularJS
- Tools: Soot Static Analysis framework, Intellij IDEA, Eclipse, Android Studio

Awards	• Recipient of the first Richard N. Taylor Graduate Award in Software Engineering • National Science Foundation (NSF) travel award to attend ASE 2019 • SIGSOFT CAPS Travel grant to attend ICSE 2018, ACM SIGSOFT, 2018 • GHC Scholarship to attend Grace Hopper Celebration of Women in Computing, 2018 • Computing Research Association scholarship to attend the 2018 CRA-W Grad Cohort for Women, 2018 • Chair's Award, UC Irvine, 2016 • Graduate Dean's Recruitment Fellowship, UC Irvine, 2016

Publications

Conference Papers

- Negar Ghorbani, Joshua Garcia, Sam Malek, "**Detection and Repair of Architectural Inconsistencies in Java**", International Conference on Software Engineering (ICSE), Montreal, QC, Canada, May 2019. (21% acceptance rate)

- Alireza Sadeghi, Reyhaneh Jabbarvand, Negar Ghorbani, Hamid Bagheri, Sam Malek, "**A Temporal Permission Analysis and Enforcement Framework for Android**", International Conference on Software Engineering (ICSE), Gothenburg, Sweden, May 2018. (21% acceptance rate)

- Joshua Garcia, Mahmoud Hammad, Negar Ghorbani, Sam Malek, "**Automatic Generation of Inter-Component Communication Exploits for Android Applications**", ACM SIGSOFT Symposium on the Foundations of Software Engineering (ESEC/FSE), Paderborn, Germany, September 2017. (21% acceptance rate)

Journal Paper

- R. Entezari-Maleki, S.E. Etesami, N. Ghorbani, A.A. Niaki, L. Sousa, and A. Movaghar, "**Modeling and Evaluation of Service Composition in Commercial Multi-Clouds using Timed Colored Petri Nets**", to appear in the IEEE Transactions on Systems, Man, and Cybernetics: Systems

Notable Course Projects

- **ERP System:** Analyzed, designed and implemented a desktop based Enterprise Resource Planning system written in Java, in RUP process.
- **Simorgh Hotel Reservation System:** Designed and implemented a web based hotel reservation system written in Python-Django, HTML and JavaScript.
- **Pingu Search:** Implemented a simple search engine for information retrieval of a set of existing publications on researchgate.com.
- **Secure E-Voting System:** Designed and implemented of a secure E-Voting protocol written in Java.
- **Simulation of Evolution:** A multi-thread simulation of the life and evolution in a visionary planet written in Java.
- **A Simple Compiler:** A compiler in JAVA programming language.
- **An Artificial Agent for 2048 Game:** Written in SWI Prolog.

Volunteering & Service

- Member of Women in CyberSecurity (WiCyS) student chapter at UCI
- Student Volunteer at International Conference on Software Engineering (ICSE) 2018
- Student Volunteer at Grace Hopper Celebration of Women in Computing 2017