# Navid Salehnamadi

https://navids.dev

#### **EDUCATION**

• University of California, Irvine

Ph.D. in Software Engineering; GPA: 4.00

Irvine, CA

Tehran, Iran

Oct. 2017 - Present

Email: nsalehna@uci.edu

• Sharif University of Technology

M.Sc. in Algorithms and Computation (Computer Science)

Sep. 2015 - Aug 2017

11.5c. in Tigoriania and Companion (Companion Science

Tehran, Iran

B.Sc. in Computer Engineering

Sep. 2011 - Sep 2015

### EXPERIENCE

• Microsoft Research

• University of Tehran

Research Intern

Seattle, WA (Remote)

Jun. 2021 - Present

• University of California Irvine

Graduate Research Assistant

Irvine, CA
Oct. 2017 - Present

- Incorporated deep learning models to fix inaccessible icons in mobile apps
- Designed and created novel testing techniques to detect 3 new categories of accessibility issues in mobile apps, unknown to existing accessibility testing techniques
- o Devised a scalable and accurate static analysis technique to detect event races, 12 times faster than existing tools

CafeBazaar

Tehran, Iran

Software Engineer

Oct. 2015 - Aug. 2017

- Coordinated a number of teams (with 6 to 11 members) to create tools for Android app developers
  - \* Established a developers panel based on microservice architecture (using Django, Docker, and Kubernetes)
  - \* Redesigned an automated system to detect malware and low-quality apps, resulting in 4 times faster turnaround time
- Inspected technical teams' performance issues at a company-wide level, leading to initiate a technical boot camp for entry-level developers

## • Sharif University of Technology

Graduate Research Assistant

Tehran, Iran

May. 2016 - Aug. 2017

• M.Sc. Thesis: Invented a general approximation method for solving a family of geometry optimization problems (such as clustering) in the sliding window model processing streams of big data, with constant time query and low memory overhead

#### **PUBLICATION**

- Data-driven Accessibility Repair Revisited: On the Effectiveness of Generating Labels for Icons in Android Apps To appear in ESEC/FSE 2021, The ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering Forough Mehralian, Navid Salehnamadi, and Sam Malek
- Latte: Use-Case and Assistive-Service Driven Automated Accessibility Testing Framework for Android Published in CHI 2021, Conference on Human Factors in Computing Systems

  Navid Salehnamadi, Abdulaziz Alshayban, Jun-Wei Lin, Iftekhar Ahmed, Stacy Branham, and Sam Malek
- ER Catcher: A Static Analysis Framework for Accurate and Scalable Event-Race Detection in Android Published in ASE 2020, 35th International Conference on Automated Software Engineering (23% acceptance rate) Navid Salehnamadi, Abdulaziz Alshayban, Iftekhar Ahmed, and Sam Malek
- Test Automation in Open-Source Android Apps: A Large-Scale Empirical Study
  Published in ASE 2020, 35th International Conference on Automated Software Engineering (23% acceptance rate)
  Jun-Wei Lin, Navid Salehnamadi, and Sam Malek
- A Benchmark for Event-Race Analysis in Android Apps (Poster)
   Published in MobiSys 2020, 18th International Conference on Mobile Systems, Applications, and Services
   Navid Salehnamadi, Abdulaziz Alshayban, Iftekhar Ahmed, and Sam Malek

### SKILLS

- Programming Languages: Java, Python, C++, SQL, Bash, Ruby
- Technologies and Frameworks: Android, Pytorch, Soot, Django, Keras, Docker, Rails
- Software Engineering: Agile (Scrum), Program Analysis, Object-Oriented Design, Design Patterns
- Notable Passed Courses: Deep Generative Models, Machine Learning, Programming Deep Neural Network, Software Testing, Big Data Algorithms, Randomized Algorithms, Social Network Analysis

### AWARDS

• The Sigma Xi Grants-in-Aid of Research	2021
• Summer Inclusive Excellence Grant - University of California, Irvine	2021
• Noyce Fellow - University of California	2021
• Chair's Award - UCI, School of Informatics and Computer Science	2017
• ACM Student Chapter Excellence Award - Outstanding School Service	2015
• Golden Medal in Iran Nationwide Scientific Olympiad - Computer Science	2014
• ACM International Collegiate Programming Contest Top 10 Teams of west Asia region	2013
• Silver Medal in Iran National Olympiad in Informatics The final step to world-final International Olympiad in Informatics	2010

## NOTABLE PROJECTS

- Soot Tutorial A series of Java code examples with visualization to learn static program analysis using Soot
- IOI Translation Developed a translation framework, used in the International Olympiads in Informatics, 2017-2020
- VAHED Designed and implemented a web app by Rails to assist students on planning for upcoming semesters, 1K users
- DM Contest Designed and built an online contest platform to apply active learning techniques for mathematic courses

### Peer-Review Service

• ACM Transactions on Software Engineering and Methodology (TOSEM)	2021
• IEEE International Conference on Software Architecture (ICSA)	2021
• Grace Hopper, Software Engineering Review Committee	2020-2021
• European Conference on Software Architecture (ECSA)	2019-2020

## LEADERSHIP EXPERIENCE AND COMMUNITY INVOLVEMENT

• Coordinator, Student Journal Club on Software Engineering and Machine Learning at UCI	2020-2021
• Live! Virtualization Team Member, International Conference on Software Engineering	2020
• Technical Organizer, International Olympiad in Informatics	2017
• Chief editor,F1 the scientific journal of the ACM student chapter of University of Terhan	2015
• Vice-chair, the ACM student chapter of University of Terhan	2014-2015
• Team Leader, Robocup Rescue Simulation, Allame Helli high school, Tehran	2011-2012