Navid Salehnamadi

https://navids.dev

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Education

- **University of California, Irvine** — Irvine, CA
  Ph.D. in Software Engineering; GPA: 4.00 — *Oct. 2017 – Present*
- **Sharif University of Technology** — Tehran, Iran
  M.Sc. in Algorithms and Computation (Computer Science) — *Sep. 2015 – Aug 2017*
- **University of Tehran** — Tehran, Iran
  B.Sc. in Computer Engineering — *Sep. 2011 – Sep 2015*

Experience

- **Graduate Research Assistant** — Irvine, CA
  University of California Irvine — *Oct. 2017 - Present*
  - Designed and created novel testing techniques to detect accessibility and delivery issues in Android apps
  - Devised a scalable and accurate static analysis technique to detect event races
  - Investigated light-weight model checkers to formally analyze uncertainty in models
- **Software Engineer** — Tehran, Iran
  CafeBazaar (Android Marketplace with 37M users) — *Oct. 2015 - Aug. 2017*
  - Coordinated a number of teams (with 6 to 11 members) in CafeBazaar, a local Android app market, to create tools for developers
    - Established a developers panel based on microservice architecture (using **Django**, **Docker**, and Kubernetes)
    - Redesigned and developed a system to automate the process of filtering out malwares and low-quality apps
  - Inspected technical teams' performance issues at a company-wide level
- **Graduate Research Assistant** — Tehran, Iran
  Sharif University of Technology — *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

Publication

- 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

- **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 2010
  The final step to world-final International Olympiad in Informatics

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

- Coordinating 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