# Ali Shokri

PhD Student and Graduate Research Assistant
Global Cybersecurity Institute | Software Engineering
Rochester Institute of Technology, NY, USA

🏠 http://a-shokri.github.io
in http://linkedin.com/in/a-shokri
@ as8308@rit.edu | alishok62@gmail.com
📍 Rochester, NY, USA

## 👥 About Me

I'm a software engineer with 14 years of experience in software industry, currently pursuing my PhD in Computer Science at the department of Software Engineering at Rochester Institute of Technology (RIT), NY, US. My main concern is to leverage Program Analysis, API Recommendation, Formal Methods, Program Synthesis, and other techniques to help programmers implement correct and sound codes. I'm always passionate about learning new things and facing new challenges.

## 🎓 Education

— **Ph.D., Computer Science** (Jan 2018-Expected Jan 2023)
Rochester Institute of Technology (RIT), NY, USA
  - Topic: Program Synthesis
  - Advisor: Dr. Mehdi Mirakhorli
— **M.Sc., Information Technology Engineering** (Feb 2011 – Jan 2014)
Tarbiat Modares University (TMU), Tehran, Iran
  - Topic: Path Planning in Modular Robots
  - Advisor: Dr. Ellips Masehian
— **B.Sc., Software Engineering** (Sep 2001- Sep 2007)
University of Tehran (UT), Tehran, Iran
  - Topic: Software Engineering
  - Advisor: Dr. Khansari

## 💼 Work Experience

— **Graduate Research Assistant - Software Design and Productivity Lab** (Jan 2018 - Present)
  - Location: Rochester, NY, USA
  - Projects Involved in: Software Synthesis, Software Certification, Security Tactics
  - Responsibilities: Research, Writing Paper, Presentation, Software Development, Software Design

— **Senior Software Engineer - Samen Ertebat Asr (SEA)** (Oct 2016 – Jan 2018)
  - Location: Tehran, Iran
  - Projects Involved in: Banking System
  - Responsibilities: Software Architecture, Software Design, Software Development

— **Senior Software Engineer - Rose System (IIN Groups)** (Aug 2016 – Oct 2016)
  - Location: Tehran, Iran

- Projects Involved in: Scientific Content Provider
- Responsibilities: Software Architecture, Software Design, Leading a Team

— **Senior Software Engineer - Melat Insurance** (Dec 2011 – Aug 2016)
- Location: Tehran, Iran
- Projects Involved in: Insurance System, Banking System, Global Distribution System (GDS)
- Responsibilities: Leading a Team, Project Management, Software Architecture, Software Design, Software Development

— **Software Engineer - Raydana** (Sep 2005 – Feb 2012)
- Location: Tehran, Iran
- Projects Involved in: Enterprise Resource Planning (ERP) System
- Responsibilities: Leading a Team, Project Management, Software Design, Software Development

— **Software Engineer - Paliz CT** (Dec 2006 – Jun 2007)
- Location: Tehran, Iran
- Projects Involved in: Tehran Municipality System
- Responsibilities: Requirement Analysis, Software Design, Software Development

— **Co-Founder & Lead Developer - Rayan Narm Fan** (Nov 2006 – Nov 2010)
- Location: Tehran, Iran
- Projects Involved in: Qeshm Entrance-Exit Control System
- Responsibilities: CEO, Leading a Team, Software Design, Software Development

— **Freelance Software Developer** (Dec 2004 – Sep 2005)
- Location: Tehran, Iran
- Projects Involved in: Software Development
- Responsibilities: Software Development, Website Development

# 👥 Skills

— **Software Development**
- Languages/Frameworks/Tools: **Java**, **J2EE**, **Hibernate**, **HTML**, Git, SVN, CSS, JavaScript, SOAP, REST, JSF, Primefaces, JSP, Matlab, Junit, JPA, JML, C, C++, Delphi, CBuilder, Python, PHP, ASP, C#, .Net Framework, GWT, Spring, Struts, PyTorch, BERT
- IDEs: **IntelliJ IDEA**, **Eclipse**, Visual Studio
- Databases: MySQL, SQL Server, Oracle, Access
- Servers: Weblogic, Tomcat, JBoss, Glassfish

— **Software Design**
- Design Paradigms: **Object Oriented**, Data Driven, Procedural
- Architectural Tactics/Patterns: **SOA**, Broker, Heartbeat, Micro-service
- Design Tools: Rational Rose, Power Designer, Luci Charts

— **Team Management**
- Scale: **5 members**, 10 members, 15 members and above

- Member's Expertise: **Software developers**, **Software designer**, graphists, System analysts
- Research
  - Conducting research: **Identifying problems**, **Critical literature review**, **Finding solutions**, Publishing results
  - Tools/Concepts: API recommendation (Itemset Mining, Sequence Mining, Graph Mining), Program Analysis (WALA), Program Synthesis (Programming-by-Example, Sketch-based Programming, Component-based Programming), Formal Methods (Event-B, Rodin)
  - Contribution: **Giving lectures and presentations, Paper review**, Teaching

# 📄 Publication

- ## Conference Papers
  - Shokri, A. and Mirakhorli, M., "ArCode: A Tool for Supporting Architectural Concerns Comprehension and Implementation", In 2021 29th IEEE/ACM International Conference on Program Comprehension (ICPC) (pp. 485-489). IEEE.
  - Shokri, A., Santos, J.C. and Mirakhorli, M., 2021, March. ArCode: Facilitating the Use of Application Frameworks to Implement Tactics and Patterns. In 2021 IEEE 18th International Conference on Software Architecture (ICSA) (pp. 138-149). IEEE.
  - Santos, J.C., Shokri, A. and Mirakhorli, M., 2020, October. Towards Automated Evidence Generation for Rapid and Continuous Software Certification. In 2020 IEEE International Symposium on Software Reliability Engineering Workshops (ISSREW) (pp. 287-294). IEEE.
  - Shokri, A. and Masehian, E., 2015, October. A meta-module approach for cluster flow locomotion of modular robots. In 2015 3rd RSI International Conference on Robotics and Mechatronics (ICROM) (pp. 425-431). IEEE.
  - Shokri, A. Hashemi, S., Akbaripour, H., Amin-naseri, M., 2013, Overcrowding Detection and Management in Emergency Department using Expert System. In 11th Iranian Conference on Intelligent Systems (ICIS2013).
  - Kazemi Tabar, J., Shokri, A., Jenadeleg, M., Optimized Job Shop scheduling as Constraint Satisfaction Problem using Genetic Algorithms. In 2007 12th Conference of Computer Society of Iran (CSICC 2007).
- ## Journal Papers
  - Hashemi, S., Shokri, A., Amin Naseri, M. and Akbaripour, H., 2014. Designing an expert system for management of crowding and overcrowding in emergency departments. Advances in Industrial Engineering, 48(2), pp.281-292.

# 👥 Contributions to SE Community

- ## Reviewer
  - Reviewer for the IEEE Software Journal (IEEE Softw.)
  - Reviewer for the Journal of Systems and Software (JSS)
  - Reviewer for the e-Informatica Software Engineering Journal (EISEJ)

- - Sub-reviewer for ACM Transactions on Software Engineering and Methodology (ToSEM)
  - Sub-reviewer at 42nd International Conference on Software Engineering (ICSE 2020)
- PC Member
  - 37th International Conference on Software Maintenance and Evolution (ICSME 2021)
  - 35th European Conference on Object-Oriented Programming (ECOOP 2021)
- Lecturer
  - RIT SWEN-610 - Graduate Level Course (Guest Lecturer): Foundation of Software Engineering (An Introduction to Program Synthesis)
  - Design Patterns (Melat Insurance Co.)
  - Java Programming (Raydana Co.)

## 🎗 Proud of

- **Data61 Research Scholarship** (2018)
  - Recipient of a prestigious scholarship for conducting my research at Data61, a world leader in data science research and engineering.
- **University of Melbourne** (2018)
  - Admitted as a fully funded PhD student at the University of Melbourne (worldwide ranked 30th) with a prestigious fellowship.
- **RIT** (2018)
  - Admitted to Rochester Institute of Technology, New York for Spring 2018 as a fully funded PhD student.
- **Monash University** (2017)
  - Admitted as a PhD student at Monash University (worldwide ranked 70th) as a PhD student.
- **Tarbiat Modares University** (2011)
  - Top 5% among participants in Tarbiat Modares University entrance exam (M.Sc.).
- **Iran Nation-wide University Exam** (2001)
  - Top 0.1% among participants in 2001 Iran nation-wide university entrance exam (B.Sc.).

## 🌐 Languages

- Persian
  - Native
- English
  - Working Proficiency
- Arabic
  - Elementary