

Education

- M.Sc., Software Engineering, Tarbiat Modares University (TMU), Iran, GPA: 3.88/4.0, ranked 1st outstanding student** 2019 - 2022
- B.Sc., Software Engineering, Babol Noshirvani University of Technology (BNUT), Iran, GPA: 3.55/4.0** 2014 –2019

Research Experience

- Researcher (Remote), Algorithms & Mathematics Group, University of Windsor** (Oct 2023 - Present)
- Conducting research under [Dr. Curtis Bright](#)'s supervision on solving mathematical problems using automated theorem provers
- Research Assistant, Safety-Critical Software & Systems lab, TMU** (Sep 2020 - Oct 2022)
- Conducted research under [Dr. Saeed Jalili](#)'s supervision on applied machine learning for software testing

Teaching Experience

- Tutor, Faradars** [\[link\]](#) (Jan 2021 - Mar 2021)
- Created and taught a C# course on Consuming Web Services
- Teaching Assistant, Advanced Programming Course, BNUT** (Feb 2017 - Jun 2017)
- Designed and oversaw a project and delegated tasks to students

Work Experience

- Web Developer Intern, Radman** (Jul 2018 - Sep 2018)
- Developed a website using C#, ASP.NET Core, and SQL Server
- Software Developer Intern, Behineh System** (Jul 2015 - Sep 2015)
- Developed management software using C# and SQL server

Publications (English)

- T. Rostami, S. Jalili, "FrMi: Fault-revealing Mutant Identification using Killability Severity,"** Information and Software Technology (Q1 Journal), 2023 [\[link\]](#)

Sample Code *(a more complete list is available on my Website, GitHub, and YouTube—links at the top of the CV)*

- MiniPyDPLL** [\[link\]](#) 2024
- Python implementation of the DPLL algorithm inspired by MiniSAT.
- Light-Gray Deep Learning** [\[link\]](#) 2024
- Implementation of algorithms such as Word2Vec, LSTM seq. classification, Seq2Seq with attention, and Transformers with beam search decoding.
- Gross Domestic Product (GDP) Estimator** 2023
- Estimating GDP in the absence of historical GDP data using SMT solvers (Z3) and machine learning clustering algorithms
- Harif - B.Sc. Final Project** [\[link\]](#) 2018
- A software to automate the university enrollment process, leveraging graph modeling and randomized search algorithms to match student preferences.

Relevant Computer Skills

- **Programming Languages:** Python (*frequently used*), C++ (*used occasionally*), C# (*extensively used in the past*), Java (*rarely used*)
- **Frequently Used Tools:** PySAT, SAT Solvers (*e.g., Mini-SAT, CaDiCaL*), March_cu (*look-ahead cube and conquer for SAT solving*), cake_lpr (*concurrent proof verification*), NetworkX, PyTorch (*including relevant machine learning and deep learning toolkits*)
- **Familiar With:** Z3, nauty (*for isomorphism rejection*), Hugging Face and LangChain (*for fine-tuning deep learning models and developing AI-powered applications*), PyGad (*for nature-inspired search*), Docker, and Git.

Languages

- **Persian - Native**
- **English - TOEFL iBT: Total 93, Reading 28, Listening 21, Speaking 22, Writing 22, April 01, 2023**

References Available Upon Request
