

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)
<ul style="list-style-type: none"> 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)
<ul style="list-style-type: none"> Conducted research under Dr. Saeed Jalili's supervision on applied machine learning for software testing 	

Teaching Experience

Tutor, Faradars [link]	(Jan 2021 - Mar 2021)
<ul style="list-style-type: none"> Created and taught a C# course on Consuming Web Services 	
Teaching Assistant, Advanced Programming course, BNUT	(Feb 2017 - Jun 2017)
<ul style="list-style-type: none"> Designed and oversaw a project and delegated tasks to students 	

Work Experience

Web Developer Intern, Radman	(Jul 2018 - Sep 2018)
<ul style="list-style-type: none"> Developed a website using C#, ASP.NET Core, and SQL Server 	
Software Developer Intern, Behineh System	(Jul 2015 - Sep 2015)
<ul style="list-style-type: none"> 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
<ul style="list-style-type: none"> Python implementation of the DPLL algorithm inspired by MiniSAT. 	
Ligh-Gray Deep Learning [link]	2024
<ul style="list-style-type: none"> Implementation of algorithms such as Word2Vec, LSTM seq. classification, Seq2Seq with attention, and Transformers with beam search decoding. 	
Gross Domestic Product (GDP) Estimator	2023
<ul style="list-style-type: none"> 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
<ul style="list-style-type: none"> 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
