Email: taha.rostami.darunkola@gmail.com

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

Publications (English)

• T. Rostami, S. Jalili, "FrMi: Fault-revealing Mutant Identification using Killability Severity," Information and Software Technology, 2023 [link]

Research Experience

Researcher (Remote), Algorithms & Mathematics Group, University of Windsor

(Oct 2023 - Sep 2024)

• Conducting research under <u>Dr. Curtis Bright</u>'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

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

SAT Log [link]

2025

• This is a collection of problems solved primarily using SAT solvers.

MiniPyDPLL [link]

2024

• Python implementation of the DPLL algorithm inspired by MiniSAT.

Light-Gray Deep Learning [link]

2024

• Implementation of algorithms such as 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.

Taha Rostami

Relevant Computer Skills

- **Programming Languages**: Python (frequently used), SQL (extensively used in the past; used occasionally when needed), C++ (used occasionally), C# (extensively used in the past), Java (rarely used)
- Frequently Used Data science Tools: PyTorch, Hugging Face, LangChain, scikit-learn, XGBoost
- Frequently Used Automated Reasoning Tools: PySAT, SAT Solvers (e.g., Mini-SAT, CaDiCaL), z3
- Familiar With: 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