

## EDUCATION

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### University of Tehran, School of Electrical and Computer Engineering

B.Sc. in Computer Engineering, Current GPA: 3.9/4.0 (18.45/20)

Tehran, Iran

2018 – Present

### Shahid Soltani 1 High School

Diploma in Mathematics and Physics, GPA: 4.0/4.0

Karaj, Iran

2014 – 2018

– Part of *National Organization for Development of Exceptional Talents*

### Selected Coursework

My top grades during the B.Sc. program are as follows:

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|---|---|
| – Advanced Programming: 20/20                     | – Data Structures and Algorithms: 20/20           |
| – Formal Languages and Automata Theory: 19.5/20   | – Artificial Intelligence: 20/20                  |
| – Operating Systems: 19.5/20                      | – Discrete Mathematics: 20/20                     |
| – Programming Languages and Compilers: 19.4/20    | – Engineering Probability and Statistics: 17.9/20 |
| – Formal Methods in Software Engineering: 18.9/20 | – Computer Networks: 16/20                        |
| – Design and Analysis of Algorithms: 20/20        | – Signals and Systems: 17/20                      |

## PUBLICATIONS

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1. Thomas A. Henzinger, Konstantin Kueffner, Kaushik Mallik, and Mahyar Karimi. “Monitoring Algorithmic Fairness”. Submitted to *29th International Conference on Tools and Algorithms for the Construction and Analysis of Systems (TACAS)*, 2023.

## TALKS AND PRESENTATIONS

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- [Monitoring of Fairness Properties in Markov Chains](#) September 2022  
Presented my summer internship work to Prof. Henzinger and Prof. Chatterjee’s group.
- [NetKAT: Semantic Foundations for Networks](#) Spring 2022  
Presented main ideas of the paper to a class of computer engineering students.

## RESEARCH EXPERIENCE

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### Institute of Science and Technology Austria

Research Intern

Klosterneuburg, Austria

Summer 2022

- Worked under supervision of [Prof. Thomas Henzinger](#), on *Monitoring Fairness of Decision Making Processes*.
- Scholarship granted by the *Austrian Agency for International Cooperation in Education and Research (OeAD-GmbH)*.

### University of Tehran

Research Assistant

Tehran, Iran

August 2021 - Present

- Collaborated with [Dr. Hossein Hojjat](#) on *Causal Reasoning in Concurrent Systems*.

## WORK EXPERIENCE

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### Divar

Software Engineer

Tehran, Iran

January – July 2022, October 2022 – Present

- Worked in the *Job Finding* team as a developer.
- Working in the *Platform Trustability* team as a developer.

### Tapsell

DevOps Intern

Tehran, Iran

Summer 2021

- Experimented with some infrastructure technologies.

## TEACHING

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### University of Tehran

- **Teaching Assistant**, *Advanced Programming* Course (Lecturer: [Dr. Ramtin Khosravi](#)) Fall 2020 – Spring 2022
- **Teaching Assistant**, *Data Structures* Course (Lecturer: Dr. Fathiyeh Faghieh) Fall 2020 – Spring 2022

## PROJECTS

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- [Koloocheh](#) (Python, gRPC) June 2022  
A Peer-To-Peer File Sharing System.
- [Jepeto Compiler](#) (Java) March – July 2021  
A Compiler for the *Jepeto* Programming Language (Practice Language Designed at My Faculty.)
- [MP](#) (Go) March 2022  
Implementation of a Message Broker in Go.
- [Dots and Boxes](#) (C with Sockets) October 2020  
The Classic Game, with Sockets for Multiplayer Gaming and Client-Server Communication.
- [Tank Trouble](#) (C++ with RSDL) January 2020  
Two-Player Game of Tank Battle, Implemented with [RSDL](#) Graphics Framework.

## ACHIEVEMENTS

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- Ranked top 2% nation-wide, national university entrance exam (mathematics group). 2018
- Ranked top 1% nation-wide, national university entrance exam (English-exclusive group). 2018
- Semi-Finalist in National Mathematics Olympiad 2016, 2017
- Semi-Finalist in National Informatics Olympiad 2017

## SKILLS

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- **Programming Languages:**
  - Skilled in Python, C++, C
  - Familiar with Go, Rust, Java
- **Tools and Libraries:** Numpy, Pandas, SPIN, ANTLR, NuSMV, Alloy
- **Technologies:** Git, Docker, Kubernetes, Nginx, Redis

## LANGUAGES

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- **English:** Upper-Intermediate
  - TOEFL iBT Score:  
Total, R, L, S, W: 112, 30, 30, 27, 25
- **Persian:** Native