

# ALI ANSARI

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🔄 [Alliance](#)

## Education

### Sharif University of Technology

Tehran, Iran

*B.Sc. in Computer Engineering*

*Oct. 2020 – present*

- Overall GPA: 19.20/20
- GPA in Major: 19.52/20

### Hasheminejad 1 High School

Mashhad, Iran

*Diploma in Mathematics and Physics*

*Sep. 2017 – June 2020*

## Honors and Awards

National University Entrance Exam of Iran (Konkur)

August 2020

- **Ranked 3<sup>rd</sup>** among more than **150,000** students

Iran National Olympiad in Informatics

July 2019

- Received **silver medal** among over **10000** students

## Research Interesets

- Deep Learning
- Trustworthy Machine Learning
- Computer Vision
- Distributed Computing
- Interpretability
- Algorithms

## Research Experiences

### Sharif University of Technology

Aug 2022 – present

*Research Assistant, supervised by Prof. M.H. Rohban*

*Tehran, Iran*

- Conducted a literature review on adversarial robustness and deep anomaly detection
- Utilized deep learning tools including **PyTorch** and **TensorFlow** to conduct various experiments
- Worked together with colleagues to create a technique for training models that can effectively withstand **adversarial attacks** across all categories of **anomaly detection**
- A paper submitted to **ICML 2024**

### Hong Kong University of Science And Technology

July 2023 – Sep 2023

*Research Assistant, supervised by Prof. A. Goharshady*

*Hong Kong*

- Designing parameterized algorithms that leverage tree-width and related parameters to identify the hierarchical structure of data locality in a sequence of memory accesses, with the aim of minimizing cache misses
- Became familiar with various topics in theoretical computer science including cryptography, program analysis and game theory

## Publications

### RODEO: Robust Outlier Detection Via Exposing Adaptive Outliers

*Submitted to ICML 2024*

- Adversarial Robustness, Outlier Detection
- [link](#) to open review

## Teaching Experiences

Teaching Assistant

- Machine Learning - Sharif University of Technology - Spring 2024
- Computer Networks - Sharif University of Technology - Spring 2024
- Probability and Statistics - Sharif University of Technology - Spring 2022
- Design & Analysis of Algorithms - Sharif University of Technology - (Fall 2022, Spring 2023, Fall 2023)
- Data Structures and Algorithms - Sharif University of Technology - (Spring 2022)
- Theory of Languages and Automata - Sharif University of Technology - (Spring 2023)

Instructor

- Algorithms and data structures to volunteers of Informatics Olympiad - 2021

## Projects

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### TinyNeRF | Python, Pytorch | Github

Winter 2024

- A simplified version of NeRF, implemented using PyTorch
- There is also an implementation of it in NeRF repository using TensorFlow
- This was the final project of Fundamentals of 3D Computer Vision course

### C-Minuse | Python | Github

Fall 2023

- As a team, implemented a Compiler for C-Minus (A simplified version of C)
- This was the final project of Compilers Design course

### YuGiOh | Java | Github

January 2021, June 2021

- Implemented YuGiOh game in Java
- Used LibGDX as the main library for the game

## Coursework

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- Optimization for Machine Learning (Online, EPFL)
- Deep Learning for Computer Vision (Online, cs231n, Stanford University)
- Convex Optimization (Sharif University of Technology, 17.8 / 20)
- Fundamentals of 3D Computer Vision (Sharif University of Technology, 20/20)
- Machine Learning (Sharif University of Technology, 20/20)
- Design & Analysis of Algorithms (Sharif University of Technology, 20/20)
- Computer Networks (Sharif University of Technology, 20/20)
- Artificial Intelligence (Sharif University of Technology, 19.8/20)
- Linear Algebra (Sharif University of Technology, 20/20)

## Work Experiences

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### Software Engineer at Divar

Tehran, Iran

- Worked with Django to develop performance evaluation system of employees of the organization *Aug. 2021 – May 2022*

## Technical Skills

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**Languages:** Python, C++, C, HTML/CSS, Java, SQL, Go, R

**Developer Tools:** Git, Docker

**Frameworks:** PyTorch, TensorFlow

## Languages

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**English** | Professional Proficiency

**Persian** | Native proficiency

## References

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