# Ali Ansari

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## Education

**Sharif University of Technology** **Tehran, Iran**
*B.Sc. in Computer Engineering* *Oct. 2020 – present*

- Overall GPA: 19.18/20
- 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 3rd** among more than **150,000** students

Iran National Olympiad in Informatics **July 2019**

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

## Research Interesets

- Distributed Computing
- Deep Learning
- Computer Vision
- Interpretability
- Generalization
- Algorithms

## Research Experiences

**Sharif University of Technology** **Aug 2022 – Sep 2023**
*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 **ICLR 2024** (Initial scores: 8 - 6 - 6 - 6)

**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 Out-of-Distribution Detection Via Exposing Adaptive Outliers**
*Submitted to ICLR 2024*

- Adversarial Robustness, Out-of-Distribution Detection
- link to open review (Initial scores: 8 - 6 - 6 - 6)

## Teaching Experiences

Teaching Assistant

- 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

**YuGiOh | Java | Github** **January 2021, June 2021**

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

**Pacman | Java | Github** **May 2021**

- Implemented a simple version of pacman in Java using LibGDX

## Coursework

- Optimization for Machine Learning (Online, EPFL)
- Deep Learning for Computer Vision (Online, cs231n, Stanford University)
- Convex Optimization (Sharif University of Technology, ongoing)
- Fundamentals of 3D Computer Vision (Sharif University of Technology, ongoing)
- 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

**Software Engineer at Divar** **Tehran, Iran**

*Aug. 2021 – May 2022*

- Worked with Django to develop performance evaluation system of employees of the organization

## Technical Skills

**Languages**: Python, C++, C, HTML/CSS, Java, SQL, Go, R
**Developer Tools**: Git, Docker
**Frameworks**: PyTorch, TensorFlow

## Languages

**English** | Professional Proficiency

**Persian** | Native proficiency

## References

Mohammad Hossein Rohban
- Assistant Professor - Sharif University of Technology
- rohban@sharif.edu

Mahdieh Soleymani Baghshah
- Associate Professor - Sharif University of Technology
- soleymani@sharif.edu

Amir Kafshdar Goharshady
- Assistant Professor - Hong Kong University of Science and Technology
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Mohammad Ali Abam
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