Amirhossein Arefzadeh

Education

B.S. in Computer Engineering

Sep 2022 - Present

University of Tehran

 \circ GPA: 18.85/20.0 (3.87/4) (Faculty Average: 14.96/20)

- o 1st Rank ⋄ Spring 2024 Semester ⋄ 19.83/20.0
- o Ranked 7th out of 90 students

Highschool Diploma in Mathematics

Sep 2019 - Jun 2022

Ario Mosallanezhad, Mashhad

o GPA: 19.6/20.0

Related Courses

- Artificial Intelligence: 19.5/20
- Basic Computer Programming: 20/20
- o Discrete Mathematics: 20/20
- Machines and Language Theory: 20/20
- o Foundations of Data Science: (current semester)
- Engineering Probability and Statistics: 17.7/20
- Advanced Programming: 20/20
- Data Structures and Algorithms: 20/20
- Engineering Mathematics: 20/20
- Database Design: (current semester)

Technical Skills

- o Languages: Python, C, C++, Java
- Databases: MySQL, MongoDB
- Frameworks & Libraries: TensorFlow, PyTorch, Scikit-learn, Pandas,
 NumPy, Beautiful Soup, Selenium, Apache Spark, Apache Kafka
- o Tools & Platforms: Git, GitHub, Linux, Docker, Makefile, Bash Script, Power BI, Tableau

Projects

- Experimental Analysis of Concept Forgetting in Generative Models GitHub Repository Implemented the "Selective Amnesia" (NeurIPS 2023) paper and extended it with novel experiments on sequential forgetting, adversarial concept recovery, and alternative gradient projection methods.
- ∘ Data Science Course Projects GitHub Repository

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A collection of projects covering fundamental and advanced data science topics, including data scraping, data visualization, big data engineering (Kafka, Spark), CI/CD automation, machine learning (regression, classification), and deep learning (MLP, CNN, RNN).

∘ Image Reconstruction with Genetic Algorithms GitHub Repository 🗹

Developed a Python-based genetic algorithm from scratch to recreate target images using triangles.

• NLP News Articles Clustering GitHub Repository

Applied clustering techniques on news articles through text preprocessing, feature extraction, and dimensionality reduction.

Connect4 Game Bot GitHub Repository

Created an intelligent Connect 4 game but using Minimax with alpha-beta pruning. Includes an interactive interface with adjustable difficulty.

o Machine Learning Classifiers GitHub Repository

implementation and evaluation of various Machine Learning classification models and walks through the process of preparing and exploring data, engineering features, and building models to classify data effectively.

Research Experience

o Research Assistant, Machine Unlearning

July 2025 - Present

 $RIML\ (Robust\ and\ Interpretable\ Machine\ Learning\ Lab)$

Under the supervision of Dr. M. H. Rohban Z and Dr. A. M. Sadeghzadeh Z

Contributed to cutting-edge research on robust and interpretable generative models by developing and implementing machine unlearning methods to enhance model safety and control.

o Investigating NLP and Brain-Inspired Models

Jan 2025 - Apr 2025

Under the supervision of Dr. Y. Yaghoobzadeh

Conducted literature review and exploratory experiments on how insights from human brain activity can improve NLP model interpretability. [NeurIPS 2019 Background Paper] **\(\mathcal{L}\)**.

Volunteering

• Artificial Intelligence Teaching Assistant

(Feb 2025 - Present)

University of Tehran

Designing assignments, reviewing submissions, and creating lesson questions.

• Advanced Programming Teaching Assistant

(Aug 2024 - Present)

University of Tehran

Designing assignments, writing test cases, and collaboration on programming course journals.

$\circ\,$ Data Structures and Algorithms Teaching Assistant

(Aug 2024 - Present)

University of Tehran

Designing lesson questions and providing detailed feedback on student responses.

o Discrete Mathematics Teaching Assistant

(Feb 2024 - Present)

University of Tehran

Assisting in classes, troubleshooting, and reviewing student submissions.

• Intro to Computing Systems and Programming Teaching Assistant

(Aug 2023 - Feb 2024)

University of Tehran

Conducted troubleshooting sessions and recorded lesson videos.

• Intro to Computing Systems and Programming Lab Supervisor

 $(Aug\ 2024 - Feb\ 2025)$

University of Tehran

Guided students in practical sessions and evaluated lab projects.

Achievements

\circ Sanjesh Organization:

Ranked 813th in Iran's National University Entrance Exam (Top 0.5%)

University of Tehran ACM Student Chapter:

Completed UT ACM Summer of Code 2024 Deep Learning Course

Interests

- $\circ\,$ Artificial Intelligence & Machine Learning
- $\circ\,$ Data Analytics & Data Science
- $\circ\,$ Algorithms & Data Structures

Languages

 \circ **Persian:** Native

o **English:** Listening: B2, Reading: C1, Writing: B1, Speaking: B2