

Nima Hosseini Dashtbayaz

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Education

Amirkabir University of Technology (among the top 3 universities in Iran)

Tehran, Iran

B.Sc. in Computer Science

2018 - 2022 (expected)

- Overall GPA: 19.02/20 (4/4)
- Ranked 1st GPA in my graduating class
- Thesis: A Survey of Methods in Few-Shot Domain Adaptation
- Selected Courses: Artificial Intelligence: A+, Linear Optimization: A+, Nonlinear Optimization: A, Numerical Linear Algebra: A+, Compilers: A+, Design and Analysis of Algorithms: A

Imam Reza High School

Mashhad, Iran

Diploma in Mathematics and Physics

2014 - 2018

- Grade: 19.47

Research Interests

- Artificial Intelligence
- Machine Learning
- Deep Learning
- Computer Vision
- Reinforcement Learning
- Autonomous Vehicles
- Recommender Systems

Skills

- **Programming Languages:** Python, Java, C, R
- **Libraries and Frameworks:** Keras, TensorFlow, Scikit-Learn, Numpy, Android
- **Environments and Tools:** Linux, Git, Postman
- **Miscellaneous:** \LaTeX , Lindo

Research Experience

A Survey of Methods in Few-Shot Domain Adaptation

Amirkabir University

Bachelor Thesis, Faculty of Mathematics and Computer Science

September 2021 - present

- Supervisor: Dr. Mohammad Akbari
- A comprehensive survey of methods used in visual domain adaptation, with a focus on few/zero-shot adaptation

Automatic Metric Selection for K-means

Amirkabir University

Statistics Laboratory, Faculty of Mathematics and Computer Science

September 2021 - present

- Supervisor: Dr. Adel Mohammadpour
- Selecting an efficient metric for the K-means algorithm automatically by recognizing the input distribution

Driver Monitoring

Amirkabir University

Data Science Innovation Center, Faculty of Mathematics and Computer Science

July 2021 - September 2021

- Supervisor: Dr. Mohammad Akbari
- Implemented with Keras, Tensorflow 2, and OpenCV
- Face Recognition model based on MobileFaceNet for verifying the driver
- Driver's actions detection model based on MobileNetV3

Experience

Undergraduate Teaching Assistant

Faculty of Mathematics and Computer Science

Amirkabir University

February 2021 - present

- **Artificial Intelligence** - Instructor: Dr. Marjaneh Goodarzi
- **Introduction to the Theory of Computation** - Instructor: Dr. Fatemeh Zare Mirakabad

Chief Editor at Halgheh Journal

Students' scientific magazine of Mathematics and Computer Science faculty

Amirkabir University

January 2021 - present

- Chief Editor of the Computer Science section
- First issue was published in January 2021, and three more have been published since then.

Students' Scientific Chapter

Faculty of Mathematics and Computer Science

Amirkabir University

September 2020 - September 2021

- Head of Research Committee
- Held interviews with professors and online meetings.

RNS Assistant Team

Android Developer at RNS-Assistant health care startup

Amirkabir University

July 2019 - May 2020

- Designed and developed Symptom Checker application.

Projects

Recommender System for MovieLens Dataset

Artificial Intelligence Course - [GitHub](#)

Amirkabir University

Spring 2021

- Includes two separate models for collaborative and content-based recommending.
- Content-based model is based on Autoencoder and trained on movie tags.
- Collaborative model is based on the AutoRec paper and trained on ratings.

Nine Men's Morris Game

Artificial Intelligence Course - [GitHub](#)

Amirkabir University

Spring 2021

- Adversarial search using minimax algorithm
- Alpha-beta pruning
- Heuristics for estimating utility

Sudoku Solver

Artificial Intelligence Course - [GitHub](#)

Amirkabir University

Spring 2021

- CSP approach with backtracking algorithm
- Variable ordering with MRV heuristic
- Forward Checking

Leasy: An Android Application for Sharing Educational Content

Software Design Course - [GitHub](#)

Amirkabir University

Fall 2020

- The application was developed with Scrum Methodology.

Client - Server Model with Shared Memory

Operating Systems Course - [GitHub](#)

Amirkabir University

Spring 2020

- Server and client programs using shared memory
- The server can handle many clients simultaneously.
- Implemented in C with pthread and semaphores

Honors & Certificates

Ranked 1st Overall GPA in My Class (19.02/20)

September 2018 - present

Computer Science Department, Amirkabir University

- Class of 70 students

Ranked Within the Top 0.8% in Iranian University Entrance Exam

July 2018

Mathematics and Physics majors

- Ranked 1103 among 144000 students

Deep Learning Specialization

Certificate on [Coursera.org](https://www.coursera.org)

- Includes courses on Neural Networks, Deep Learning, Sequence Models, and Computer Vision.

Python for Data Science and Machine Learning Bootcamp

Certificate on [Udemy.com](https://www.udemy.com)

- Covers many topics in Data Science, Data Visualization, and Machine Learning.

Languages

- **Persian:** Native
- **English:** Fluent
 - TOEFL IBT: 116 (Reading and Listening: 30, Speaking: 27, Writing: 29)
 - GRE scheduled for November 10th.