

# Nima Hosseini Dashtbayaz

Website: [nimahsn.github.io](https://nimahsn.github.io)  
Email: [nimahsnd@gmail.com](mailto:nimahsnd@gmail.com)  
LinkedIn: [nimahsn](https://www.linkedin.com/in/nimahsn)  
GitHub: [github.com/nimahsn](https://github.com/nimahsn)  
Phone: (+98) 915 383 1909

## 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 1<sup>st</sup> GPA in my graduating class
- 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

## Experience

### Research Assistant

Amirkabir University

Data Science Innovation Center

July 2021 - September 2021

- Supervisor: Dr. Mohammad Akbari
- Subject: Driver Monitoring with Computer Vision
- 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

### Undergraduate Teaching Assistant

Amirkabir University

Faculty of Mathematics and Computer Science

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

Amirkabir University

Students' scientific magazine of Mathematics and Computer Science faculty

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

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

## RNS Assistant Team

Android Developer at RNS-Assistant health care startup

- Designed and developed Symptom Checker application.

Amirkabir University

September 2020 - September 2021

Amirkabir University

July 2019 - May 2020

## 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 1<sup>st</sup> Overall GPA in My Class (19.02/20)

Computer Science Department, Amirkabir University

September 2018 - present

- Class of 70 students

### Ranked Within the Top 0.8% in Iranian University Entrance Exam

Mathematics and Physics majors

July 2018

- Ranked 1103 among 144000 students

### Deep Learning Specialization

Certificate on [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 scheduled for October 9th.
  - GRE scheduled for November 10th.