# Arash Asgari Mendejin

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**₩**Birthdate: Tehran 1461993915, Iran 1999.06.08 **™**Nationality: Iranian **♦** Phone: +98 912 898 4680

**Website:** GitHub: arashasg.github.io https://github.com/arashasg

> Gender: Male

### Education

Sep 2021-Present MSc, Software Engineering, Sharif University of Technology,

> Member of Intelligent Software Engineering Lab **Supervisor**: Dr. Abbas Heydarnoori

Sep 2017–Sep 2021 BSc, Software Engineering, K.N. Toosi University of Technology,

Cumulative GPA: 19.04/20 (US CGPA: 3.99/4), Ranked 1st in class of 75.

**BSc Thesis**: Monocular 3D vehicle Tracking on Road Scenes **Supervisor**: Dr. Behrooz Nasihatkon

Referee: Dr. Hamid Abrishami Moghaddam

Selected Courses: Fundamentals of Computer Vision, Fundamentals of Speech and Language

Processing, Linear Algebra, Engineering Probability, Engineering Mathematics, Numerical Analysis, Data Structures, Principles of Database Design, Assembly and Machine Languages (all grades 20/20)

System Analysis and Design(19.57/20), Algorithm Design(19.5/20), Signals and Systems(18.5/20)

Pre-University, GPA:20/20 Allame Helli Pre-university School in Tehran 2016-2017 2013-2016 Secondary School, GPA: 19.66/20 Allame Helli Highschool in Tehran

### **Fields of Interests**

Software Engineering, Artificial Intelligence, Computer Vision, Machine Learning, Natural Language Processing.

Specific Software Repository Mining, Crowdsourcing, 2D & 3D Object Detection and Tracking, Medical image

Segmentation, Generative Models like VAEs and GANs.

#### **Publications**

Intelligently Assessing Jupyter Notebooks' Code Understandability 2022

**Empirical Software Engineering Journal** 

Status: Submitted

#### **Honors and Awards**

Sep 2020–July 2021 Dean's List fourth year of study. Dean's List second year of study. Sep 2018–July 2019

Sep 2018–July 2020 Excellent Students Scholarshhip, from Kanoon Farhangi Amooozesh. Sep 2017–July 2021 Full Tuition Fee Waiver, from K. N. Toosi University of Technology.

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## **Academic Experience**

Spring 2022 Teaching assistant, System Analysis and Design, Sharif University of Technology,

Instructor: Dr. Heydarnoori

Fall 2020 Teaching assistant, Advanced Programming with Java, KNTU,

Instructors: Dr. Mehdi Esnaashari, Mahdi Zamanian

Fall 2019 Teaching assistant, Algorithms, KNTU, Instructor: Dr. Ali Ahmadi

## Language

Farsi (Native), English (Professional Proficiency)

#### TOEFL iBT

september-4 2021 Total: 112 | Reading:30 | Listening:30 | Speaking:24 | Writing:28

## **Technical Skills**

Languages Python, Java, C++, Javascript, Typescript.

Libraries Keras, Tensorflow, Pytorch, OpenCV, scikit learn, Numpy, MNE, Braindecode, Matplotlib,

Seaborn, Reactis.

Programming Object Oriented and Functional Programming, OOP Design Patterns.

Natural Language Processing Text Categorization, Text Summarization, Text Generation, Machine Translation,

Spelling Suggestion

Image Processing Morphological Operations, Image Transformation and Registration.

Computer Vision Real-time Multiple Object Detection and Tracking, Background Subtraction,

Feature Extraction and Matching, Camera Calibration and Geometry.

Linux Distros Ubuntu.

Concepts Version Control Systems such as Git and GitHub, Agile Project Management with Scrum,

Dynamic Programming, REST Web Services, MLOps.

IDEs VScode, Pycharm, IntelliJ IDEA.

## **Projects**

#### Related coursework projects

January 2022 Persian News Summarizer | Natural Language Processing
January 2022 Persian Spelling Correction | Natural Language Processing

January 2021 Soccer player detection and classifying them into two teams using background subtraction,

morphological transforms, and Deep learning models. | Fundamentals of Computer Vision.

June 2020 Otimized Matrix Operations | Digital System Design

June 2019 Implementing Voronoi diagram using Java | Algorithm Design.

January 2019 Image blending using x86 Assembly | Assembly and Machine Language

Personal projects

November 2021 Seizure Detection using FCN and LSTM models.

September 2021 3D vehicle Tracking using Optical Flow and Geometry constraints.

January 2021 The colorectal nuclear image segmentation using U-net.

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## **Work Experience**

May 2021-July 2021 Computer Vision Intern at Almedic, Iran.

July 2021-Now Machine Learning Engineer at Almedic, Iran.

Mostly worked at EEG data preprocessing section and implementing preprocessing modules like

applying filters and windowing.

## **Certificates**

	Verified certificates from Coursera online MOOC platform.
August 2020	Machine Learning   Stanford University.
August 2020	Hyperparameter tuning, Regularization, and Optimization   deeplearning.ai.
August 2020	Convolutional Neural Networks   deeplearning.ai.
August 2020	Structuring Machine Learning Projects   deeplearning.ai.
August 2020	Neural Networks and Deep Learning   deeplearning.ai.
	Audits
December 2020	Introduction to Computer Vision   Georgia Tech   Udacity Online Platform
December 2020	Convolutional Neural Networks for Visual Recognition   Stanford University