# MOHAMMAD ERFAN NAYEB AGHAEI

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♠ ErfanNayeb
♦ Tehran, Iran

## EDUCATION

Bachelor's Degree In Computer Engineering (See Transcript)

University of Tehran (1<sup>st</sup> University Among Universities in Iran and 329<sup>th</sup> in Global Universities)

**Sep** 2019 - Aug 2023

🛭 Iran

**GPA:** 3.54/4

GPA of last 60 units: 3.85/4 Supervisor: Dr. Kazim Fouladi

### RESEARCH INTERESTS

- Computer Vision
- Natural Language Processing
- Machine Learning
- Data Science

### **Publications**

Nayeb Aghaei, M.E., Alipour, A. (2023) Design and Implementation of a Content Recognition System for National ID Cards Using Machine Vision.

# Under Preparation

Nayeb Aghaei, M.E., Alipour, A. (2023) Data Analysis in Banks and Investment Institutions for Credit Allocation.

H Under Preparation

Verdegem, P. (2021) AI for Everyone?. Translated by M.E. Nayeb Aghaei. London: University of Westminster.

#### AWARDS & ACHIEVEMENTS

- Awarded Tuition-Waiver at Tehran University
- Ranked within the top 10% of the class
- Ranked within the top 1% of the Iran's universities entrance exam

#### TEACHING EXPERIENCES

## Fundamentals of Computer and Programming

Dr. Kazim Fouladi

Sep 2021 - Feb 2022

- Language: C++
- Responsibility: Grading Projects and Assignments, Solving Students Problems, Mentoring.

## **Physics**

Dr. Fatemeh Eshaghi

Sep 2020 - Feb 2021

- Responsibility: Grading Assignments, Solving Students Problems.

### Industry Experiences

## Frontend Developer

Lavan Oil Refining Company. Internship

**H** Jul 2022 - Sep 2022

**♀** Iran

- Worked on their website to improve the performance & User interface by enhancing the Front-End codes.
- Learned React.js, TypeScript & Tailwind.
- Developed my teamwork abilities, punctuality & interpersonal skills.

### ACADEMIC PROJECTS

## National ID Cards information Extractor Application

University of Tehran

**⊞** Aug 2023

- Can Extract the Iranian national ID cards information
- Developed with YOLOv5, Tesseract OCR (custom font), Django for the Application, & SQLite for the Database

Project link

#### Lane Lines Detector

University of Tehran

₩ Jul 2023

- Can Detect lanes in test images and video using OpenCV library.

Project link

**MNIST** 

University of Tehran

**₩** May 2023

- Handwritten digit classification based on CNNs

Project link

### **News Text Classification**

University of Tehran

₩ Jun 2022

- Persian news text classification from Hamshahri corpus based on Bidirectional LSTM.

Project link

## **Memory Allocation**

University of Tehran

₩ May 2022

- Learned to use memory management techniques such as Paging & Segmentation.
- Developed with Python & used a graphical interface with PyQt.

Project link

	Recommender System University of Tehran
	<ul> <li>Can offer new products to customers based on their previous purchases.</li> <li>Developed with Python &amp; Two-Tower Recommendation Model for recommending new products.</li> <li>Project link</li> </ul>
	OS Scheduling System University of Tehran  Dec 2021
	- Simulated CPU scheduling with FCFS, RR and SFJ scheduling algorithms Developed with Python & used a graphical interface with Tkinter. Project link
SELEC	CTED COURSE PROJECTS
	Road Signs Object Detection
	- Implemented YOLOv5 to detect four critical road signs: traffic lights, stop signs, speed limit signs, and crosswalks. Project link
	Chatbot
	- Developed a retrieval based chat-bot with Python based on ANN. Project link
	Sentiment Analysis
	- Comparison and evaluation of sentiment analysis algorithms such as NB, SVM, LR, CNN, LSTM, CNN-LSTM on Amazon reviews.  Project link
	Digikala
	- A shopping site based on a famous Iranian online shop developed with Python & Django. Project link
	Rasad
	- A self-startup project that is about managing visitors, The boss can monitor the visitors with this app Developed Back-end with Django & Learned to use Docker.  Project link

### Car Contorller

₩ May 2022

- using  $a^*$  algorithm to automatically find path to control parking car with AI Project link

#### Computer Skills

### AI Professional Skills. 1 yrs:

- Python(TensorFlow,PyTorch,Keras,Pandas, NumPy, Matplotlib, Scikit-Learn)
- Deep Learning (ANN, CNN, RNN, GAN, LSTM)

## Front-end Professional Skills. 2 yrs:

- JavaScript, TypeScript, React.js
- Tailwind, Bootstrap, Sass

## Language Skills:

- Persian: Native
- IELTS Overall: 7

### Other Skills:

- Django, Docker, Git, Linux(Ubuntu)
- C++, Java
- Methodologies (Agile, Scrum)
- LaTex, Word, PowerPoint, Excel

### Trained Courses

## Deep Learning, Andrew Ng

Coursera

₩ March 2023

## Machine Learning, Andrew Ng

Coursera

₩ April 2023

## **Machine Learning**

YouTube Stanford CS229

₩ Mar 2022

## Artificial Intelligence

YouTube Standford CS221

**⊞** Feb 2022

## Python

Utech academy (Tehran University)

**∰** Jan 2022

## **Mastering React**

Mosh

₩ Dec 2021

## The Modern Javascript

**Udemy** 

₩ Sep 2021

### VOLUNTEER WORKS

#### IPRIA 2023 Conference Executive Team

₩ Feb 2023 - Mar 2023

- The 6<sup>th</sup> International conference on Pattern Recognition and Image Analysis Held at the Department of Computer Engineering, University of Tehran.

### MVIP 2020 Conference Executive Team

 $\stackrel{\longleftarrow}{\mathbb{H}}$  Feb 2020 - Mar 2020

- The 11<sup>th</sup> Iranian and The First International Conference on Machine Vision and Image Processing Held at the Department of Computer Engineering, University of Tehran.

## Hobbies & Interests

- Professional Basketball player,7 yrs
- Crypto Currency, Blockchain and Financial markets
- Internet Of Things and Robotic

## REFERENCES

- Dr. Kazim Fouladi: kfouladi@ut.ac.ir
- Dr. Mahdi Seyfipoor: mahdiseyfipoor@ut.ac.ir
- Dr. Alireza Maleki: maleki@lorc.ir