

# Mohammad Saeed Motevali

Iran , Tehran \$\pi +989023899856 ⊠ s.motevali96@gmail.com

## Education

2018-present Bachelor of Technology in Computer Engineering.

Amirkabir University Of Technology, Iran, Tehran

16.89

2016–2018 High School Diploma , Mathematics.

Shahid Beheshti High School

19.50

# General Skills

Machine Learning, Deep Learning, Data Preparation, Pattern Recognition Data visualization, Agile Methodologies

Familiar with Blockchain, Cryptocurrency analysis and trading

# Technical Skills

Programming Python(Numpy, Pandas, Keras, Seaborn, Matplotlib, scikit-learn, OpenCV), Spark Hadoop, CSharp(.Net),

Languages C++, Racket, HTML/CSS, Javascript(Vuejs, Nodejs)

Operating Linux(ubuntu), Windows

Systems

Databases Mysql, Postgresql , Mongodb , Sqlite

Languages Persian(Native), English(Professional working proficiency)

Industry Algorithms, OOP, Design patterns, Machine Learning, Deep Learning

Knowledge

Miscellaneous Git, Jupyter Notebook, Google Colab, Pycharm, VSCode

# **Projects**

## Handwrite digit recognition.

Objective: Handwrite digit recognizer using neural networks and deep learning

**Description**: First implementation with Deep learning using neural networks implemented by python and numpy, second implementation using transfer learning using customized CNN networks, Data augmentation using Auto Augment

#### **Evolutionary Games.**

Objective: Implement a smart agent for playing the game using GAN network

**Description**: The game is implemented with pygame, the agent progresses using neural network trained with evolutionary algorithm and transfer learning

#### Divar Data analyses.

**Objective**: Create a model for analysing user car ads by special standards

**Description**: Using word2vec and tf-idf for word embedding / using XGboost, SVM, Random Forrest for Classification tasks, bidirectional LSTM and Bert model for NER, LDA for topic modeling and a neural network as an ensembling model

# Smart CCTV camera.

**Objective**: Implement a program for detecting humans and changes in videos. we can use this for CCTV cameras thus we can just save the periods with abnormal human actions and also give alert at that very time

**Description**: Using different algorithms for change detection , denoising(Morphology) , object detection , filtering ...

## FCM algorithm.

Objective: Implementing fuzzy k-means clustering algorithm

Description: Using numpy for implementation and matplotlibs for visualization

Tabein.

Objective: Fullfeature Lms and social media.

Description: CSharp , .Net core web api , SignalR for backend and Vuejs for frontend

#### PostService.

**Objective**: ECommerce platform and order management system

Description: developing, testing and deploying backend services with CSharp, .Net core web api based

on CQRS, MediatR pattern and Microservice architecture, SignalR and Vuejs for frontend

## Content Managment System.

Objective: Fullfeature CMS

Description: CSharp, .Net core web api for backend and Vuejs for frontend

Jpotify.

Objective: Simple music player simulated from spotify

**Description**: Java , Swing

# Major Courses Undertaken

Computer Principles of Computational Intelligence, Data mining, Computer Simulation, Information Retrieval, Engineering Principles and Applications of Artificial Intelligence, Design and Analysis of Algorithms, Linear Algebra,

Database Design, Software Engineering, Data Structures, Computer Networks

Mathematics Engineering Statistics, Linear Algebra, Differential Calculus

# Certificates and Workshop

- 1 Machine Learning by AndrewNG Coursera
- 2 Deep Learning by AndrewNG Coursera

# Teaching Experiences

Fall 2020 Teaching Assistant, Linear Algebra, under supervision of: DR. Nazerfard.

Spring 2020 **Teaching Assistant, Data mining**, under supervision of: DR. Nazerfard.

## Achivments and Awards

Ranked 156 at university entrance exam

## Interests

Artifcial Intelligence, Machine Learning ,Deep learning ,Computer Vision

Al in Cryptocurrency analysis and trading

Backend development

## References

#### Dr. Ehsan Nazerfard.

Email: nazerfard@aut.ac.ir

Homepage: http://ceit.aut.ac.ir/ nazerfard