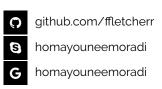


Machine Learning and Computer Vision Researcher





## WHO AM I?

Experienced Head of R&D with a demonstrated history of working in Machine Learning and Computer Vision fields. Skilled AI Researcher with a Master of Science from University of Tehran.

Pytorch JavaScript Opencv Pandas MongoDB

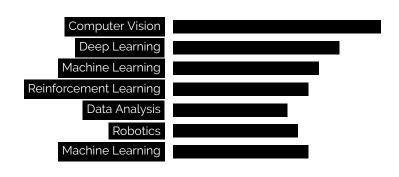












# **EXPERIENCE**

part time

part time

2021 - Presnet Al Developer **Odyssey Startup Studio** 

Develope AI-based Products Which Are Used by Canadian Startups.

2020 - 2022 Senior Al Developer part time

Smart Smile Design Based-on Computer Vision Techniques.

2019 - 2021 **Computer Vision Scientist** 

Knowledge Extraction and Intention Recognition Using Cutting Edge AI Technologies.

2018 - 2020

**Head of Computer Vision Team** Control and AI Lab - IUST

Multi-Agent and Autonomous Vehicles 3D Perception, Road Scene Understanding and Analysis

of Surveillance Videos.

2016 - 2018 Co-Founder 3DFAST

The First Online 3D Printing Service and Social Marketplace Based in Tehran. We Made an Online

Platform That Provides 3D Printing Services by Connecting Customers and Vendors.

2015 - 2016 **Control Engineer** CETEC

#### **PROJECTS**

2021 2019

Persian OCR

Table Structure Recognition

**Face Spoofing Detection** 

COVID-19 Persian Tweets Analysis tsetmc + Sahamyab Data Analysis Face Detection and Recognition

**Human Action Recognition** 

Image Retrieval

Music Metadata and Text Analysis Scene Multi-Label Classification

Fusion-based 3D Object Analysis Aerial Image Segmentation Supermarket Product Counter Multi Object Tracking

## **EDUCATION**

2019 - Presnet Master of Science - MS, Artificial Intelligence GPA:19.23 University of Tehran

**ISAA Project** 

**SUSLIB** 

Advisor: Prof. Behzad Moshiri and Dr. Mehdi Tale Masoole

Thesis: Human-Robot Interaction Using Soft/Hard Information Fusion, Case Study: NAO Robot Activities:

- -Research Assistant at NBIC, Supervised by Dr. MohammadReza A. Dehaqani, Human Action Classification Using EEG Signal Processing
- -Teaching Assistant for Big Data, Dr. Masoud Asadpour Spring 2021
- -Teaching Assistant for Information Theory and Learning, Dr. Pooya Shariatpanah, Dr. Maryam Sabaghian - Fall 2021

#### 2012 - 2016 Bachelor's Degree, Control Engineering

Iran University of Science and Technology (IUST)

Advisor: Prof. Aliakbar Jalali

Thesis: IoT for Smart Cities: Use Cases and Implementation Strategies

Activities: Teaching Assistant for Signal and Systems, Prof. Aliakbar Jalali - Fall 2019

## **PAPERS**

ICRoM 2021

Robots Learn Visual Pouring Task Using Deep Reinforcement Learning with Minimal Human Effort

H.Moradi, M.T.Masouleh, B.Moshiri

The entire pipeline for teaching a robot to perform the visual pouring task is addressed with a minimal human supervision. The reinforcement learning approach is employed without the use of reward engineering where the reward function is approximated by a Convolutional Neural Network

## **HONORS**

- First Rank in DataDays2021 Challenge. Design a Recommender System Based-on Hybrid Approach for torob.com
- 5th Rank in DigiCup2021 (Data Science).
- 33th Rank in the Iranian University Entrance Exam for master's degree in Artificial Intelligence.

## OTHER TECH SKILLS

- Familiar with SQL and Redis.
- Robotics Operating System (ROS).
- 3Build and Deploy Machine Learning Web Apps Using JavaScript.
- Working with Deep Learning Optimization Tools (TensorRT, ONNX)
- Build AI Services Using Docker and ML Serving Tools Like Torch-Serve, Triton, Ray.
- Familiar with Generative Networks, Transformers, and Audio Processing Techniques.
- Familiar with Useful AI Frameworks like HuggingFace, stable-baselines3, RLlib, MMlab, Gensim, Spacy, Kornia, JAX, ... .

## REFERENCES

Prof. Behzad Moshiri (moshiri@ut.ac.ir)

Professor in University of Tehran

My Master's Thesis Supervisor.

Dr. Mehdi Tale Masouleh (m.t.masouleh@ut.ac.ir)

Associate Professor in University of Tehran

My Master's Thesis Supervisor.

Dr. Mohammad Hossein Rohban (rohban@sharif.edu)

Assistant Professor in Sharif University

Scientific Supervision in ISAA Project.

Dr. Saeed Shamaghdari (shamaghdari@iust.ac.ir)

Associate Professor in IUST

Supervisor of Control and AI lab inIran University of Science and Technology (IUST).

Amir Houieh (amir@suslib.com)

Co-Founder of SUSLIB