



# HANIE POURSINA

## MACHINE LEARNING RESEARCHER

### CONTACT ME AT

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 @HaniePoursina

### SKILLS SUMMARY

●●●● Python Programming

●●●● Software Development

●●●● Machine Learning

●●●● Team Management

●●●● Soft Skills

### PERSONAL PROFILE

Computer Engineer - Co-founder of AI and IoT powered Startup - Curious about Generative Models and Optimization Methods.

### WORK EXPERIENCE

#### Co-Founder at PIXIE

PIXIE, Smart Door Locks Startup | Nov 2020 - Oct 2021

- Deployed Face Recognition on Hardware
- Developed a Distributed System based on Fog Computing
- Send and Received Messages (Lock Status and Commands from Apps) by Message Brokering Protocols in Real-Time.
- Product Manager and Responsible for Cache Flow, Marketing and Pitching to Investors.

#### AI partnership in DigikalaNext

DigikalaNext, Innovation Center of Digikala | Sep 2020 - Nov 2020

#### Internship

Iran Information and Communication Technology Research Institute | Jun 2019 - Sep 2019

- Developed a Real-Time Face Recognition Project by Java
- Learned and Researched about Image Processing
- Work with OpenCV library

### RESEARCH PROJECTS

#### ioFog, Edge Computing

- Developed a Distributed System based on Fog Computing
- Bringing Docker and Kubernetes to Edge Layer By Technology named ioFog.
- Deploy, Run and Network Distributed Micro-Services at the Edge Layer.
- Use Message Broker Protocol in Edge Layer.

## Variational AutoEncoders

- Develop Architecture of an AutoEncoder
- Used Speech Datasets and worked with melspectrogram library from Torch
- Calculate Loss Function with two terms of reconstruction error and KL divergence.

## YOLO

- Detect Traffic Signs with YOLO
- Used YOLOv5 to detection
- Dataset taken from Kaggle

## Image Search

- Used CLIP(Contrastive Language-Image Pre-training) Pre-trained Model and train it with crawled images and its captions describing them
- Developed APIs with FastAPIs framework
- Received images by POST API and after finding the corresponding text explaining the picture, the relative images would returned

## EDUCATIONAL HISTORY

### University of Isfahan

BSc in Computer Engineering | Sep 2016 - May 2021

- Minor in Computer Engineering
- Thesis involved developing and testing and running ioFog platform technology on three Raspberry Pis

## REFERENCES

### Dr Ali Bohlooli

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