# Ashkan Ganj



# **EDUCATION**

#### **Worcester Polytechnic Institute**

Master of Science in Computer Science

[Ranking] [website] Worcester, MA, USA 2023–current

# **University of Mohaghegh Ardabili**

Bachelor of science in computer engineering

[Times Ranking] [website] Ardabil, Ardabil, Iran

2018-2022

- Cumulative GPA: 3.8/4 (18.25/20) till now via 145 credits
- Ranked 2 th cumulative GPA within the top 5% of graduating class (among 41 students)

# RESEARCH INTERESTS

3D vision, Deep Learning, Machine Learning, NLP, Computer Vision

**Computer Vision :** Mobile vision, 3D vision, Object detection, Image Classification, Image Segmentation, and

Object Tracking.

Natural Language Processing: Visual Description, Image Captioning, Text-to-Image Generation

## **PUBLICATIONS**

1. **A. Ganj**, M. Darvish, M. EbadPour, H. Bahador "LR-Net: A Block-based Convolutional Neural Network for Low-Resolution Image Classification", *Iranian Journal of Science and Technology, Transactions of Electrical Engineering, Oct 2022 (Accepted)*[arXiv] [Code]

# **TEACHING ASSISTANT**

**Data structure and Algorithm:** The department of computer engineering Fall 2021

Instructor : Masumeh Kheyri

**Software engineering:** The department of computer engineering Fall 2021

Instructor: Ahmad Taghinejhad

**Discrete Mathematics:** The department of computer engineering winter 2021

Instructor: Masumeh Kheyri

#### **PROJECTS**

See full list of projects on github.com/AshkanGanj

Instance Segmentation with Mask R-CNN (Python, Keras, Tensorflow, 2021)

Fine-tuned and implemented Mask R-CNN on a specific category collected from OpenImages data [Github]

CIFAR-10 classification (Python, Keras, 2021) classify 50000 images in 10 classes with CNN [Github]

Pneumonia Detection (Python, Keras, 2021) classify x-ray images with a custom CNN [Github]

# **HONORS & AWARDS**

• Awarded distinguished student in the department of electrical and computer engineering

2018-current

• Ranked 2<sup>th</sup> in Ardabil programming contest

May-2019

• Top 2 % in the Iranian national university entrance exam among 300,000 participants.

june-2018

#### SKILLS

# • Programming Languages:

Python, C++, TypeScript, JavaScript

· Machine learning and Deep learning:

Tensorflow, Scikit-learn, Matplotlib, Pandas, Numpy, Jupyter-Notebook

• Databases: PostgreSQL, MySQL

• Operating System: Microsoft Windows, Debian GNU/Linux

• Front-end: Angular, Html, CSS

• Back-end: Django, Flask

# LANGUAGES

• Persian: Native

• Turkish-Azari: Native

• English: IELTS: 6.5 (R:7, L:7, S:6, W:6.5)

# **TECHNICAL EXPERIENCE**

# Access Endless Communication(AEC)

Front-end Developer-Internship

[website] - Tehran August 2020 - march 2021

# **COURSES**

#### **Deep Learning Specialization**

Authorized by DeepLearning.Al and offered through Coursera Instructor: Andrew Ng

- Neural Networks and Deep Learning [Certificate]

- Hyperparameter Tuning, Regularization and Optimization [Certificate]
- Structuring Machine Learning Projects [Certificate]
- Convolutional Neural Networks and Sequence Models [Certificate]
- Sequence Models [Certificate]

**Machine Learning** 

[Certificate]

[Certificate]

2021

2020-2021

Offered by Stanford University through Coursera Instructor: Andrew Ng