Mahdi Darvish

Education

2018–2022 Bachelor of Science in Computer Engineering,

(Expected) University of Mohaghegh Ardabili, Ardebil, Iran.

- Cumulative GPA: 3.77 / 4.00 till now via 90 credit (50 left)
- \circ Ranked 1st cumulative GPA within the top 2% of graduating class
- $2013\hbox{--}2017~$ High School Diploma in Mathematical physics,

Allameh Helli High School,

National Organization for Development of Exceptional Talents, Tehran, Iran.

- \circ Cumulative GPA: 3.94 / 4.00
- Graduated in Top 10% of Class

Research Interests

Computer Vision

Instance & Semantic Segmentation, Object Localization, Object Detection and Tracking, ConvNet Architecture, Scene Understanding and Generative Models

Honors & Awards

2018-current Awarded distinguished student in the department of electrical and computer engineering,

University of Mohaghegh Ardabili, Ardabil province, Iran.

Dec 2019 Ranked 1st in the 2nd UMA Copa Code (UCC), University of Mohaghegh Ardabili, Ardabil province, Iran.

May 2019 Ranked 3rd in the 1st Code Cup of Mohaghegh (CCM), University of Mohaghegh Ardabili, Ardabil province, Iran.

2015~&~2016 Selected for $2^{\rm nd}$ stage of $27^{\rm th}$ and $28^{\rm th}$ International Olympiad in Informatics.

Tehran province, Iran

Academic Projects

- Instance Segmentation via Training Mask R-CNN [GitHub]
 Combining Google Open Images with COCO-dataset weights and training a
 Mask R-CNN model to accurately create a instance mask for pumpkins.
- Comparative Analysis of ConvNet Architecture on Bird Species Dataset [GitHub]

An implementation of famous convolutional neural networks on Bird species dataset using Python 3, Keras, and Tensorflow.

- YOLOv3 from Scratch: Analaysis and Implementation [GitHub] Implemented the YOLOv3 algorithm from scratch using PyTorch and explained the general architecture of algorithm.
- COVID-19 Analysis and Visualization [GitHub]

 Tracking and Visualizing the spread of COVID-19 worldwide with a special focus on Iran.

Teaching Assistant

Winter 2020 Database Systems, The department of computer engineering,

Instructor: Ahmad TaghiNezhad.

Winter 2020 **Discrete Mathematics**, The department of computer engineering, Instructor: Masumeh Kheyri.

Skills

• Programming Languages

Python (Upper-Intermediate), R (Intermediate) and Octave (Intermediate)

Frameworks and Packages

Tensorflow, Keras, PyTorch, Matplotlib, Seaborn, Pandas, Numpy, Jupyter-Notebook, OpenCV, Django, Pillow

Databases

PostgreSQL, MySQL and familiar with MongoDB

Coursework

2020–2021 Deep Learning Specialization,

(Expected) authorized by DeepLearning.AI and offered through Coursera, Instructor: Andrew Ng, [Certificate].

- Neural Networks and Deep Learning
- Hyperparameter Tuning, Regularization and Optimization
- Structuring Machine Learning Projects
- o Convolutional Neural Networks and Sequence Models

2020–2021 Machine Learning,

(Expected) Offered by Stanford University through Coursera,

Instructor: Andrew Ng, (5 Weeks left).

• Skills Gained: Logistic Regression, Artificial Neural Networks, Machine Learning Algorithms, Machine Learning

Languages

Persian: Native English: Fluent

References

• Shahram Jamali

Professor - Faculty Member - The department of computer engineering - University of Mohaghegh Ardabili jamali@uma.ac.ir