Milad Soltany Kadarvish

Email: **Soltany.m.99@gmail.com**
LinkedIn: **milad-soltany/**
GitHub: **github.com/miladsoltany**
Tel: **+98 930 981 4539**

Education

Iran University of Science and Technology — Tehran, Iran
BSc in Electrical Engineering - Control — 2017–2021 (Expected)

- Total CGPA: 3.62/4, (16.63/20)
- CGPA via last 60 credits: 3.85/4, (17.75/20)

Awards and Honors

- Ranked 2nd Team in FIRA competitions in Autonomous Cars league (race section) — Winter and Spring of 2021
- Ranked 3nd Team in FIRA competitions in Autonomous Cars league (urban section) — Winter and Spring of 2021
- Ranked 1st Team in the National Rahneshan competitions for Autonomous Vehicles — Fall 2020 - Winter 2021
- Ranked 2nd Team among more than 140 teams in National Data-Days competitions — Winter 2020
- Ranked 68th (99th percentile) in National University Entrance Exam for Mathematics and Physics — 2017
- Ranked 28th (99th percentile) in National University Entrance Exam for Foreign Languages — 2017
- Top student for 6 consecutive semester at the ILI (Iran Languages Institute) — 2014-2015

Research Interests

- Artificial Intelligence
- Computer Vision
- Deep Learning
- Autonomous Driving
- GANs
- Machine Learning

Academic Projects

Grand Projects

- Fully autonomous vehicle (Final Project) — (April 2021 - Present)
- Unauthorized Load Detection using Stereo Cameras — (2020 - 2021)
- Fully autonomous vehicle (simulated in unity) — (May-July 2020)
- Smart Library with gesture recognition and visual book identification — (June-August 2020)
- Online Ad-Recommender System — (Jan - March 2020)

Minor Projects

- In-depth analysis and implementation of a CGAN
- Implementing a fully-connected neural network from scratch using no libraries
- Depth-estimation using SGBM
- Sentiment analysis on the Sentiment140 dataset
- Face Detection using YOLO
- Face recognition using a Siamese neural network
- Street sign dataset collection
- System identification for various modes of EHS 160 multi-process system
- Background subtraction for highway videos using classic computer vision and deep learning
- Pseudo-random number generator for various distributions using no libraries
- PID Controller design (Linear Control systems project)
- Ultrasonic distance measurement with visual and bluetooth output (Linear Algebra project)

Experience

Research Experience

- AI Researcher at AI and Control Lab, Iran University of Science and Technology — Summer and Fall 2020
  Working on computer vision projects
- Co-Founder, Instructor and Mentor at Artificial Intelligence and Robotics (AIR) Center — July 2020 - Present
  Holding programming and robotics classes

Teaching Experience

- Teaching Assistant at IUST — Winter 2021
  Mechatronics
- Instructor at AIR Center — Winter 2021
  Introduction to Deep Learning Course
- Instructor at AIR Center — Fall 2020
  Zero to Hero Python Bootcamp
- Mentor at AIR Center — Fall 2020
  Zero to Hero Data Science and Machine Learning Course
- Mentor at AIR Center — Summer 2020
  Zero to Hero Python Bootcamp
- Instructor at Soroush Languages Institute — Fall 2017
  English Tutor

Computer Skills

- Python3
  - Numpy
  - NPM
  - Matplotlib
  - OpenCV
  - Scikit-Learn
  - Keras
  - PyTorch
  - Tensorflow
- Git
- Arduino, AVR
- Matlab
- C/C++
- Latex
- CodeVision AVR

Online Courses

- GANs Specialization, Coursera
- Python Zero to Hero Bootcamp, Udemy
- Neural Networks and Deep Learning, Coursera
- Improving Deep Neural Networks: Hyperparameter tuning, Regularization and Optimization, Coursera
- Convolutional Neural Networks, Coursera
- Structuring Machine Learning Projects, Coursera
- Sequence Models, Coursera
- Introduction to Self-Driving Cars, Coursera
- Tensorflow in Practice Specialization, Coursera

Languages

- **English:** Fluent
  - **IELTS** Score: Mock Test — Jan 2021 (Official test to be taken soon)
    - L(8), R(7.5), S(7.5), W(6.5). Overall (7.5)
- **Persian:** Native
- **Kurdish:** Native