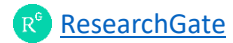


Parsa Mohammadi | Curriculum Vitae

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🌐 <https://parsam.eu.pythonanywhere.com>

✉ ParsaMohammadi@aut.ac.ir



EDUCATION

- **Amirkabir University of Technology (AUT)**, Tehran, Iran September 2020 – Present
 - B.S. in Electrical Engineering
 - Ranked within the top 10% of the Electrical Engineering department
 - Ranked within the top 1% of the Iranian University Entrance exam
- **Shahid Beheshti**, Kermanshah, Iran September 2016 – September 2020
 - **National Organization for Development of Exceptional Talents (NODET)**
 - GPA: 18.87 out of 20.00
 - Ranked within the top 2% of the Nationwide NODET Entrance exam

RESEARCH INTERESTS

- Computer Vision
- Signal Processing

EXPERIENCES

- **Machine Learning Intern** July 2022- Present
 - [Asr Gooyesh Pardaz](#) · Full-time, Tehran, Iran
 - Implemented signal processing models
 - Implementation signal processing models on the backend
 - Supervisor: Dr. H. Sameti (Sharif University of Technology, Tehran, Iran)
- **Teaching Assistant** February 2023 – July 2022
 - Amirkabir University of Technology (AUT), Tehran, Iran
 - Course:** “Linear Control Systems - Electrical Engineering”
 - Assisted students by solving sample questions and guiding them in the lesson.
 - Taught linear control topics related MATLAB and Simulink.
 - Provided education material, including projects and weakly homework.
 - Supervisor: Dr. A. Suratgar (Amirkabir University of Technology, Tehran, Iran)
- **Research Assistant** December 2021 – July 2022
 - Iran's National Elites Foundation (INEF), Tehran, Iran
 - Project:** “Data-driven Maintenance of Urban Infrastructure in Smart City”
 - Using Random Forest, K-means algorithms and Neural Networks to reduce the cost of maintenance and repair of power networks
 - Create Decision Support web application for control centers using Django
 - Implement trained Machine Learning models on the web application

Publication:

- Tamanaeifar, M. H., Nasiri, M. G., **Mohammadi, P.**, Haghshenas, M., Ghadamgahi, M. M., Alimadady, M., Fereidunian, A. (2022, September). *Collaborative Design and Development of Integrated Preventive Maintenance Decision Support Software for Smart City Infrastructure based on Accumulated Data Analytics* [Paper presentation]. 8th International Conference on Industrial and Systems Engineering, Mashhad, Iran. (<https://civilica.com/doc/1537570>)

- Supervisor: Dr. A. Fereidunian (K. N. Toosi University of Technology, Tehran, Iran)

Project: "Prediction of Eye Fixation for Neuromarketing"

- Collect data and create a human eye fixation dataset by concocting various experiments.
- Implementation of neural network models to predict eye fixation and advertising effectiveness.

- Supervisor: Dr. M. A. Akhaey (University of Tehran, Tehran, Iran)

SKILLS

- Programming Skills

Python

- TensorFlow
- NumPy
- Pandas
- OpenCV
- Matplotlib
- Sklearn
- Django
- PyQt
- Threading
- Async IO

C/C++

HTML/CSS

JavaScript

Matlab

- Electrical Libraries
- Simulink

VHDL

- IP Core

Verilog

- Machine Learning Skills

Classic algorithms

- Regression
- Classification
- Decision tree
- SVM
- Clustering
- PCA

Image processing

- CNN
- Transfer Learning
- Object Detection
- U-Net
- Style Transfer
- Siamese Network

Signal processing

- RNN
- LSTM

- Others

Linux

Git

Docker

ISE Design Suite

Vivado Design Suite

Proteus 8

Google Colab

CERTIFICATED COURSES

- **Machine Learning**

Offered By: Stanford University

Platform: Coursera

Instructor: Dr. Andrew Ng

- **Deep Learning Specialization**

- **Neural Networks and Deep Learning** (First course)
- **Improving Deep Neural Networks: Hyperparameter Tuning, Regularization and Optimization** (Second course)
- **Structuring Machine Learning Projects** (Third course)
- **Convolutional Neural Networks** (Fourth course)
- **Sequence Models** (Fifth course)

Offered By: DeepLearning.AI

Platform: Coursera

Instructor: Dr. Andrew Ng

- **Django for Everybody Specialization**

- **Web Application Technologies and Django** (First course)

Offered By: University of Michigan

Platform: Coursera

Instructor: Dr. Charles Severance

- **MATLAB for beginners**

Offered By: MathWorks

Platform: MatlabAcademy

Instructors: MathWorks Team

VOLUNTEERING EXPERIENCES

- **Amirkabir University of Technology (AUT)** March – September 2021

Member of "Amirkabir 2021 International Summer School," Executive Team:

Tasks:

- Invited Dr. Larry Cheng from Penn State University
- Been Dr. Larry Cheng's assistant during summer school

- Supervisor: Dr. Roohollah Bagherzadeh (Amirkabir University of Technology, Iran)

- **Member of Amirkabir Astronomy Club** April 2023 - Present

Tasks:

- Design and implementation of astronomical events

Honors

- **Win 1st place prize of IEEE Open Data Hackathon Competition** November 2022

LANGUAGE PROFICIENCY

- English (Fluent)
- Persian (Native)
- Kurdish (Native)