

Mohamad H. Alizade

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EDUCATION

Sharif University of Technology

Bachelor of Science, Electrical Engineering — GPA (Last Two Years): 17/20

Oct. 2017 – Sept. 2022

Tehran, Iran

University of Tehran

Course-based Studies in Master's of Biomedical Engineering

Sept. 2022 – Present

Tehran, Iran

SELECTED COURSES

Tensor Decompositions (Graduate)	19.5/20.0 (A)
Medical Imaging Systems (Graduate)	18.4/20.0 (A)
Medical Signal & Image Processing Lab	20.0/20.0 (A)
Probability & Statistics	20.0/20.0 (A)
Numerical Analysis	19.0/20.0 (A)
Foundation of Programming	20.0/20.0 (A)
B.Sc Project II	19.0/20.0 (A)
B.Sc Project I	18.0/20.0 (A)
Calculus II	18.7/20.0 (A)
Calculus I	17.3/20.0 (A)

- **Other Courses** — Foundation of Image Processing, Stochastic Processes (Graduate), Convex Optimization

PUBLICATIONS

Kernel-based Joint Multiple Graph Learning and Clustering of Graph Signals

Mohamad H. Alizade, Aref Einizade, and Jhony H. Giraldo

Nov. 2023

Under Review at IEEE Signal Processing Letters arXiv:2310.19005 — [pdf]

RESEARCH EXPERIENCE

Simultaneous Dimensionality Reduction and Graph Learning

2023 – Present

Supervisor: Dr. Einizade

Independent Research

A data-driven model to simultaneously reduce the number of variables and infer their relationship.

Low-Rank Tensor Decomposition for NN Model Pruning

2021 – 2022

Supervisor: Dr. Sepideh Hajipour

Independent Research

Reduces the computational burden of a data-driven model by merging and trimming the computation paths.

Processing of Brain Signals for Biomarkers of Alzheimer's Disease

2022 – 2023

Supervisor: Dr. Manouchehr S. Vafae

Independent Research

Active Contours on Segmentation of Retinal Images of the Eye

2021 – 2022

Supervisor: Dr. Vosoughi Vahdat

Sharif University — BSc Project

Given an image of the retina, we segmented the different parts of this image by a snake-like contour that converges to regions of interest.

PEER REVIEW

IEEE Signal Processing Letters

2023

TEACHING EXPERIENCE

- **Teaching Assistant, Soft Computing**

Sharif Uni., EE Dep.

Tasks included designing theoretical and MATLAB homeworks and grading them

Instructor: Dr. Hajipour

SKILLS

- **Programming Languages:** Python, MATLAB, SQL, C
- **Libraries:** PyTorch, Scikit-learn, Networkx, Numpy, Matplotlib, Seaborn, SQLite
- **Softwares:** L^AT_EX, Git, Linux, Vim

LANGUAGE PROFICIENCY

- **Farsi(Persian):** Native
- **English:** Proficient — TOEFL iBT: (104) R29/L30/W24/S21, December 7, 2022