

Alireza Ghafouri

Education

✉ alirezaghafouri77@gmail.com

🌐 alireza-ghafouri.github.io

in alirezaghafouri

GitHub Alireza-Ghafouri

M.Sc. in Computer Engineering - Artificial Intelligence

Master's degree program

Thesis: *Semi-Supervised representation learning using deep generative models*

Supervisors: [Dr. Reshad Hosseini](#), [Dr. Mostafa Tavassolipour](#)

Final Grade: 19.30/20 (4/4), **Ranked 2nd**

University of Tehran

Sep 2021 – Sep 2024

B.Sc. in Computer Engineering

Bachelor's degree program

Final grade: 18.33/20 (3.7/4), **Ranked 2nd**

University of Kashan

Sep 2017 – Sep 2021

Research Interests

✓ Generative AI

✓ Trustworthy AI

✓ Multimodal Learning

✓ Representation Learning

Research Experience

Computational Audio-Vision Lab ([Website](#))

Advisers: [Dr. Reshad Hosseini](#), [Dr. Mostafa Tavassolipour](#)

Jul 2023 – Present

University of Tehran

- Investigated diverse deep generative model architectures and analyzed their applications to computer vision tasks.
- Developed and evaluated semi-supervised representation learning methods for robustness across limited-label datasets.

Neural marketing using eye movements Prediction ([Website](#))

Research Adviser: [Dr. Ramin Toosi](#)

Jan 2023 – Jun 2023

[Avir Artificial Intelligence Center](#)

- Implemented and benchmarked video saliency prediction models using proprietary eye-tracking datasets.
- Analyzed eye-movement data to model cognitive mechanisms underlying customer purchase decisions.

Recommendation Systems ([Seminar Report](#))

Research Advisers: [Dr. Abdol-Hossein Vahabie](#), [Zahra Ebrahimian](#)

Sep 2022 – Mar 2023

University of Tehran

- Performed literature review and comparative study of video-based recommendation algorithms.

Publications

VAE-FixMatch: Towards Robust Representation Learning in Semi-Supervised Settings

in final preparation for submission

Alireza Ghafouri, Reshad Hosseini, Mostafa Tavassolipour

University of Tehran

Honors & Awards

NMA Admission

Served as TA and Lead TA at [Neuromatch Academy](#)

2023-2025

Ranked 2nd

The master's degree program

2024

Ranked 19th

National Master's Entrance Exam

2021

Ranked 10th

Student Scientific Olympiad of the country

2021

Ranked 2nd

The bachelor's degree program

2021

Straight M.Sc. Admission

Offered by three top universities for exceptional talent

2021

Exceptional Talents

Awarded as a Distinguished Student by The University Committee

2020

Tuition Fee Exemption

Bachelor & Master's level studies

2017 & 2021

Among the top 2%

National Universities Bachelor's Entrance Exam

2017

Selected Courses

• Machine learning	20/20 (4/4)	• Data Analysis	19/20 (4/4)
• Deep Learning and Applications	19.25/20 (4/4)	• Statistical Inference	18/20 (4/4)
• Natural Language Processing	18.40/20 (4/4)	• Reinforcement Learning	20/20 (4/4)
• Artificial Intelligence	19.50/20 (4/4)	• Computational Intelligence	20/20 (4/4)

Teaching Experience

Machine Learning (TA) - [Youtube1, Youtube2]	Spring 2022, 2023
<i>Dr. Mohammadreza Abolghasemi, Dr. Mostafa Tavassolipour</i>	University of Tehran
Artificial Intelligence (Head TA)	Spring 2022
<i>Dr. Hossein Ebrahimpour</i>	University of Kashan
Deep Learning and Applications (TA)	Spring 2023
<i>Dr. Reshad Hosseini</i>	University of Tehran
Computational Neuroscience (TA & Lead TA) - [Certificate, Certificate]	Summer 2023,2024
<i>Global collaboration</i>	Neuromatch Academy
Deep Generative Models (TA)	Fall 2023
<i>Dr. Mostafa Tavassolipour, Dr. MohammadAmin Sadeghi</i>	University of Tehran
Statistical Inference (TA)	Fall 2023
<i>Dr. Mohammadreza Abolghasemi</i>	University of Tehran
Natural Language Processing (TA)	Spring 2024
<i>Dr. Javad Salimi Sartakhti</i>	University of Kashan
Trustworthy AI (TA + Guest Instructor)	Spring 2024
<i>Dr. Mostafa Tavassolipour</i>	University of Tehran
Deep Learning (Lead TA) - [Certificate]	Summer 2025
<i>Global collaboration</i>	Neuromatch Academy
Analysis and Design of Deep Neural Networks (TA)	Fall 2025
<i>Dr. Babak N Araabi, Dr. Ahmad Kalhor</i>	University of Tehran

Academic Projects

Deep Learning and Applications	Spring 2022
<i>Dr. Reshad Hosseini</i>	University of Tehran

- Deep fully connected neural network implementation (from scratch using numpy)
- Saliency map prediction using deep neural networks 
- Implementation of a deep fully connected network for inverting visual representations of a CNN 
- Brain tumor image segmentation Using U-net architecture 
- Part of speech tagging for Persian Language using deep recurrent model 

Natural Language Processing	Spring 2022
<i>Dr. Heshaam Faili, Dr. Yadollah Yaghoobzadeh</i>	University of Tehran

- Applying Naive Bayes classification for Spam and Truth detection.
- Conducting POS tagging and Named Entity Recognition (NER) tasks on the Penn Treebank dataset. 
- Executed multilingual classification and Persian NLI tasks with BERT-based models.
- Performing question-answering task on a Persian dataset using a BERT-based model.

Data Analysis	Fall 2021
<i>Dr. MohammadAmin Sadeghi</i>	University of Tehran

- Analysing Corona virus infection
- Scraping Alibaba and MrBilit tickets and analysing the prices
- Web crawling and data cleaning: Obtaining Laptop Listings from Digikala

Social Networks	Fall 2022
<i>Dr. Masoud Asadpour</i>	University of Tehran

- Persian Users' Graph of Tweets Network Analysis in Iran's 2022 Protests

Skills

Programming	Python (Pytorch, Tensorflow, Pandas, NumPy, Scikit-Learn, Matplotlib, NLTK, etc.), R, SQL
Soft Skills	Leadership, Team Work, Problem Solving, Time Management, Adaptability/Flexibility
Languages	Persian (Native), English (C1 - TOEFL IBT Overall best Score: 106 (Reading: 27, Listening: 26, Speaking: 25, Writing: 28) - last Score: 104 (R: 27, L: 26, S: 23, W: 28)

References

Dr. Reshad Hosseini

📍 University of Tehran

✉️ reshad.hosseini@ut.ac.ir

Dr. Mostafa Tavassolipour

📍 University of Tehran

✉️ tavassolipour@ut.ac.ir

Dr. Javad Salimi Sartakhti

📍 University of Kashan

✉️ salimi@kashanu.ac.ir