

RESEARCH INTERESTS

Deep Learning, Multimodal Generation, Trustworthy AI, Deep Learning-Guided Program Synthesis, Reinforcement Learning

EDUCATION

Bu-Ali Sina University

MS in Artificial Intelligence

Hamedan, Iran

Sep 2023 - Present

- CGPA: 19.28/20.00 | 4.00/4.00, Ranking: 1st

- Thesis: *Mitigating Spurious Correlations in Image Datasets via Diffusion-Based Counterfactual Data Augmentation*

University of Kurdistan

BS in Computer Engineering

Sanandaj, Iran

Sep 2019 - Jul 2023

- CGPA: 17.64/20.00 | 3.65/4.00, last two years: 19.24/20.00 | 4.00/4.00

EXPERIENCE

Robot Intelligence & Vision Lab

Graduate Research Assistant - Supervisor: *Prof. Hassan Khotanlou*

Hamedan, Iran

Mar 2025 - Present

- Exploring the use of diffusion models for counterfactual augmentation to mitigate spurious correlations in image datasets.

Matina AI

AI Engineer

Tehran, Iran

Apr 2024 - Jan 2025

- Investigating LLM post-training approaches.
- Creating LLM post-training datasets.

Quera

Course Instructor

Tehran, Iran · Remote

Mar 2021 - Feb 2022

- Create and optimize programming courses tutorials.
- Design programming problems and develop unit tests for them to judge the submitted answers.
- Help students to debug their codes and solve their issues.

PUBLICATIONS

1. SB. Hosseinbeigi, MA. SeifKashani, J. Seraj, F. Taherinezhad, **A. Nafisi**, F. Nadi, I. Barati, H. Hasani, M. Amiri, M. Masoudi, "Matina: A Culturally-Aligned Persian Language Model Using Multiple LoRA Experts," *ACL Findings*, 2025.
2. F. Daneshfar, S. Soleymanbaigi, **A. Nafisi**, P. Yamini, "Elastic deep autoencoder for text embedding clustering by an improved graph regularization," *Expert Systems with Applications*, 2024.

HONORS & AWARDS

- **3rd Place** in the LLM Agents Hackathon May 2025
- **1st Place** in the Rayan International AI Contest Dec 2024
- **2nd Place** in the Quera Large Language Model Hackathon Mar 2024
- **3rd Place** in the 28th Computer Engineering regional Olympiad (Region 5) Jun 2023
- **1st Place** in the 27th Computer Engineering regional Olympiad (Region 5) Jul 2022
- **Qualifying and participating** in the ICPC 2020 regional contest Dec 2020

TEACHING EXPERIENCE

Teaching Assistant at Bu-Ali Sina University

2023 - Present

- *Digital Image Processing, Deep Learning, Machine Learning, Artificial Intelligence, Web Search and Information Retrieval*

Teaching Assistant at University of Kurdistan

2022 - 2023

- *Natural Language Processing, Artificial Intelligence, Design and Analysis of Algorithms, Advanced Programming, Computer Networks*

SKILLS & TECHNICAL TOOLS

Programming: Python, C/C++

ML/CV Tools & Libraries: PyTorch, Keras, HuggingFace libraries, OpenCV, Scikit-Learn, Pandas, NumPy, Matplotlib

Languages: Persian (native), Arabic (native), English (proficient)

Others: Git, \LaTeX , Linux

SELECTED PROJECTS

- **Compositional Image Retrieval:** A system that retrieves the best image using visual and text inputs [GitHub](#)
- **Backdoored Model Detection:** A system that classifies models as either backdoored or clean [GitHub](#)
- **Hierarchical Group Robustness:** A robust image classifier that can handle hierarchical group structures [GitHub](#)
- **Denoising Framework:** A system that denoises images according to their noise type [GitHub](#)

CERTIFICATIONS

- Introduction to LangGraph, *LangChain Academy* [Certification](#)
- TensorFlow Developer Specialization, *DeepLearning.AI* [Certification](#)
- Deep Learning Specialization, *DeepLearning.AI* [Certification](#)
- Mathematics for Machine Learning and Data Science Specialization, *DeepLearning.AI* [Certification](#)
- Reinforcement Learning Specialization, *University of Alberta* [Certification](#)
- Machine Learning Specialization, *DeepLearning.AI* [Certification](#)

REFERENCES

Prof. Hassan Khotanlou

Iran

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Prof. Muharram Mansoorizadeh

Iran

Associate Professor, Bu-Ali Sina University

- Email: mansoorm@basu.ac.ir