Farnaz Sadat Mirnezami

EDUCATION

B.Sc in Computer Engineering

Sep 2019 - Aug 2023

University of Guilan, Rasht, Iran

GPA: 3.68/4 (17.69/20)Last two years GPA: 3.8/4

RESEARCH INTERESTS

Machine Learning

- Deep Learning
- Computational Linguistic
- Computer Vision

Natural Language Processing
 Large Language model

RESEARCH PAPERS

PsychoLex: Unveiling the Psychological Mind of Large Language Models (Published)

Nov 2024

MA Abbasi, **FS Mirnezami**, H Naderi

WORK EXPERIENCE

Research Assistant July 2024 - Present

Iran University of Science and Technology, Tehran, Iran

Working on Natural Language Processing(NLP) and Large Language Models(LLMs) projects.

Machine Learning Researcher

Dec 2023 - Apr 2024

ISACO, Tehran, Iran

• I worked on analyzing time series data using Machine Learning methods.

SELECTED PROJECTS (More Projects on GitHub)

Brain Tumor Detection and Classification | GitHub

• This project, consists of a deep learning models to identify multiclass (meningioma, glioma, and pituitary) brain tumors, and an U-Net model for image segmentation.

Sentence Similarity Classification | <u>GitHub</u>

• Using RNNs, I developed a model that can determine similarity between two sentences and deal with Data Labeling, Text Processing and Classification Networks.

Multi-Class Weather Classification | GitHub

• In this project, I have trained a CNN model that can classify image into sunrise, cloudy, shiny and rainy categories based on the weather.

Students' Academic Performance | <u>GitHub</u>

• In this project, I developed a custom Neural Network from scratch and with ML frameworks to predict whether a student - based on educational characteristics – will fail or pass.

Time Series Forecasting | GitHub

• Using DL and ML models, I analyzed multivariate time series data and predicted future demand for the next months based on historical data from several months prior.

TEACHING ASSISTANT EXPERIENCE

Advanced Programming | University of Guilan | Instructor: Dr. A. Khozaei

Fall 2021

• Designing programming assignments and projects

Algorithm Design | University of Guilan | Instructor: Dr. A. Khozaei

Fall 2021

Preparing assignments and projects, assessing assignments, grading students' performance

Formal Languages and Automata | University of Guilan | Instructor: Dr. S. M. Shekarian

Spring 2022

Preparing assignments, grading students' assignments

Computer Architecture University of Guilan Instructor: Dr. H. Ahmadifar	Spring 2022
 Assessing assignments, grading students' project 	
Digital System Design Teaching Assistant University of Guilan Instructor: Dr. M. Aminian	Fall 2022
 Solving students' problem, grading students' project 	
Artificial Intelligence Teaching Assistant University of Guilan Instructor: Dr. Y. Boreshban	Fall 2022
 Grading students' project, providing feedback on assignments 	
System Analysis and Design Teaching Assistant University of Guilan Instructor: Dr. F. Feyzi	Fall 2022

HONORS AND AWARDS

•	Top 1% among 164,278 participants in the Iranian University Entrance Exam for undergraduate program, Iran	2019
•	Receiving full scholarship from University of Guilan for the undergraduate program (Tuition Waiver)	2019
•	Accepted in first round of the Khwarizmi Youth Festival	2018
•	Attending in 2^{nd} National Scholastic Festival of Ibn Sina for creating line follower robot	2017

SKILLS

- **Programming Languages:** Python, Java, C++, VHDL
- Machine Learning Frameworks: TensorFlow, Keras, Pytorch, Huggingface
- Data Visualization: Pandas, Numpy, Seaborn, Matplotlib, Scikit-learn

Guiding students throughout the project, grading students' project,

- Web Development: HTML, CSS, MySQL
- Extra Tools: Git, Latex
- Others: Problem Solving, Teamworking, Teaching

CERTIFICATES

- Neural Network and Deep Learning | Instructor: Andrew Ng | Certificate
- Improving Deep Neural Networks: Hyperparameter Tuning, Regularization and Optimization | Instructor: Andrew Ng | <u>Certificate</u>
- Structuring Machine Learning Projects | Instructor: Andrew Ng | Certificate
- Supervised Machine Learning: Regression and Classification | Instructor: Andrew Ng | Certificate
- Advanced Learning Algorithms | Instructor: Andrew Ng | Certificate
- Unsupervised Learning, Recommenders, Reinforcement Learning | Instructor: Andrew Ng | Certificate
- **Convolutional Neural Networks** | Instructor: Andrew Ng | *Certificate*
- **Sequence Models** | Instructor: Andrew Ng | *Certificate*

SELECTED COURSES

Advanced Programming: 20, Engineering Probability and Statistics: 20, Algorithm Design: 19.25, Database: 20,
 Software Testing: 20, Artificial Intelligence and Expert Systems: 20

LANGUAGES

• English: Fluent (IELTS Score: Overall 7 - L: 8.5, S: 7, R: 6.5, W: 6) • Persian: Native

REFERENCES

- **Dr. Mahdi Aminian** | Email: mahdi.aminian@guilan.ac.ir | (Google scholar)
 Assistant Professor, Department of Computer Engineering, University of Guilan, Rasht, Iran
- Dr. Hassan Naderi | Email: naderi@iust.ac.ir | (Google scholar)
 Associate Professor, Department of Computer Engineering, Iran University of Science and Technology, Tehran, Iran
- **Dr. Farid Feyzi** | Email: feizi@guilan.ac.ir | (<u>Google scholar</u>)
 Assistant Professor, Department of Computer Engineering, University of Guilan, Rasht, Iran
- **Dr. Seyed Mohammadhossein Shekarian** | Email: shekarian@guilan.ac.ir | (Google scholar) Assistant Professor, Department of Computer Engineering, University of Guilan, Rasht, Iran