# 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

## **Diploma in Mathematics and Physics**

Sep 2016 - Jun 2019

Fateme Alzahra High School
• GPA: 4/4 (19.75/20)

#### 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 (Accepted) | Pre-print

**Aug 2024** 

MA Abbasi, FS Mirnezami, H Naderi

#### WORK EXPERIENCE

## **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** | GitHub

• Using RNNs, we 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, we have trained a CNN model that can classify image into sunrise, cloudy, shiny and rainy categories based on the weather.

## Students' Academic Performance | GitHub

• 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

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

#### **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)
   Assistant 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