

# ZAHRA AHMADI

+989128494351   ✉ xahraahmadi99@gmail.com   in linkedin.com/in/zahra-ahmadii   github.com/x1ew  
x1ew.github.io   📍 Tehran, Iran

## Education

### Guilan University

*Bachelor of Science, Computer Engineering*

Sep 2019 – Aug 2023

*Rasht, Iran*

- GPA: 3.66/4 (17.95/20)
- Last two years GPA: 3.8/4

## RESEARCH PAPERS

### Sperm Analysis

In progress

- Zahra Ahmadi, Yazdan Haghi, Seyed Abolghasem Mirroshandel, Yasaman Boreshban
- In this research project, we employed Meta-learning to improve the accuracy of sperm abnormality detection.

## INTERESTS

- Machine Learning   • Deep Learning   • Computational Neuroscience   • Computer Vision
- Natural Language Processing

## PROJECTS

### Normal Cyst Tumor And Stone | *PyTorch*

Github

- I've implemented Convolutional Neural Networks (CNNs), ResNet, and VGG for kidney CT image classification

### Amazon Reviews | *PyTorch*

Github

- Sentiment analysis model with Logistic Regression on preprocessed Amazon Reviews, featuring diverse classification models (Embedding, BERT, Neural Networks) and text processing (tokenization, lemmatization, stemming).

### An Odd Music Generator | *PyTorch, Python, Librosa*

Github

- Project explores Autoencoders, audio processing, Seq2seq models, with Denoising, Note Recognition, Note Prediction, Noise Maker components, and an LSTM-based n-gram language model for music composition.

### Analyzing Human Metaphase II Oocyte Images | *PyTorch*

Github

- This project showcases a robust deep learning-based multiclass semantic segmentation method designed for human metaphase II oocyte image analysis, as described in a paper

### NLP Subject Similarity | *PyTorch, TensorFlow*

Github

- The project uses neural networks for textual similarity analysis, including Data Labeling, Multi-label RNN Classification, Text Preprocessing, and Classification Networks.

### Four In Row | *Python, PyGame*

Github

- The game is in single-player mode, with an AI Agent using the Negamax algorithm.

## EXPERIENCES

### Artificial Intelligence | *University of Guilan* | *Head TA*

Fall 2022

- Instructor: Dr. Y. Boreshban
- I oversaw assignments, guided projects, and created informative neural network videos to enhance learning and comprehension.

### Algorithm Design | *University of Guilan* | *Head TA*

Fall 2021

- Instructor: Dr. A. Khozaei
- I planned and assessed programming assignments for students.

### Data Structure | *University of Guilan* | *Head TA*

Fall 2021

- Instructor: Dr. F. Feyzi
- I designed and evaluated assignments for students to implement complex data structures and algorithms, including priority queues, hash tables, and linked lists.

### Discrete Mathematics | *University of Guilan* | *Head TA*

Fall 2020 | Fall 2021

- Instructor : Dr. S. M. Shekarian
- I created weekly assignments and provided assessments with valuable feedback to help students

**Digital Circuits** | *University of Guilan* | *Head TA*

**Fall 2021**

- Instructor: Dr. M. Aminian
- It was my responsibility to develop projects and assess assignments.

**Computer Aided Design** | *University of Guilan* | *Head TA*

**Fall 2022**

- Instructor: Dr. M. Aminian
- I evaluated weekly assignments, designed the final project working with the FPGA board, and resolved the student's problem.

**Microelectronic Circuits** | *University of Guilan*

**Spring 2023**

- Instructor: Dr. M. Aminian
- My responsibilities were to solve students' problems and assess assignments.

## CERTIFICATIONS

---

- **Build Basic Generative Adversarial Networks (GANs)** | *Coursera, DeepLearning.AI* | *[certificate]* **2023**
- **Deep Learning Specialization** | *Coursera, by Andrew Ng* | *[certificate]* **2023**
- **Machine Learning** | *Coursera, by Andrew Ng* | *[certificate]* **2022**
- **Introduction to TensorFlow** | *Coursera, by Laurence Moroney* | *[certificate]* **2022**
- **Convolutional Neural Networks in TensorFlow** | *Coursera, by Laurence Moroney* | *[certificate]* **2022**
- **Introduction to Data Science in Python** | *Coursera, by University of Michigan* | *[certificate]* **2021**
- **Divide and Conquer, Sorting and Searching, and Randomized Algorithms** | *Coursera* | *[certificate]* **2021**
- **Graph Search, Shortest Paths, and Data Structures** | *Coursera, by Stanford University* | *[certificate]* **2021**

## SKILLS

---

**Programming Languages:** Python, Java, C++

**ML Frameworks:** Pytorch, TensorFlow, Keras, Scikit-learn, Huggingface

**Data Science Tools:** Numpy, Pandas, Matplotlib, Seaborn

**Web Development:** HTML, CSS, MySQL

**Operating Systems:** Linux(Ubuntu), Windows, macOS

**Extra Tools:** Git, Latex

## AWARDS AND ACHIEVEMENTS

---

**Full Scholarship, B.Sc, University of Guilan**

**Ranked 10th among B.Sc Computer Engineering Students**

## LANGUAGES

---

- **English:** Fluent (IELTS: Overall 7)
- **Persian:** Native

## REFERENCES

---

**Dr. Seyed Abolghasem Mirroshandel** | *University of Guilan*

**Rasht, Iran**

- Associate Professor of Computer Engineering
- Email: mirroshandel@guilan.ac.ir
- Google scholar

**Dr. Mahdi Aminian** | *University of Guilan*

**Rasht, Iran**

- Assistant Professor of Computer Engineering
- Email: mahdi.aminian@guilan.ac.ir
- Google scholar

**Dr. Farid Feyzi** | *University of Guilan*

**Rasht, Iran**

- Assistant Professor of Computer Engineering
- Email: feizi@guilan.ac.ir
- Google scholar