# DANIYAL FARHANGI

dan.farhangi@gmail.com danfarh.github.io

+98 (937) 353-8508

Chaptarh

▼ Tehran, IranIn DaniyalFarhangi

#### **EDUCATION**

### Bachelor's Degree In Computer Engineering (See Transcript)

**E** Sep. 2019 - Aug. 2023

University of Tehran (First University Among Universities in Iran and 329th in Global Universities)

**♥** Ira

GPA: 3.88/4 (18.23/20) GPA of last two years: 4/4 Supervisor : Dr. Kazim Fouladi

#### RESEARCH INTERESTS

• Artificial Intelligence

- Machine Learning
- Deep Learning

- Natural Language Processing
- Computer Networking
- Smart Communication

#### **AWARDS & ACHIEVEMENTS**

- Acknowledged as an exceptionally talented student, placing in the top 5% among undergraduates.
- Awarded Tuition-Waiver at University of Tehran.
- Ranked **top 1%** in the national university entrance exam (among 150,000 students).

### **RESEARCH EXPERIENCES**

# Undergraduate research assistant at the University of Tehran

Jan. 2022 - Jul. 2022
University of Tehran

Under Supervision of Dr. Kazim Fouladi

- · Worked on open-domain generation-based dialogue systems.
- · Worked on sentiment analysis algorithms such as NB, SVM, LR, CNN, LSTM, CNN-LSTM, and BERT, and evaluating and comparing the performance of these algorithms against each other.

### **TEACHING EXPERIENCES**

### Signals and Systems

Dr. Hossein Aghababa

Feb. 2023 - Jul. 2023 University of Tehran

· Responsibilities: Holding Practice Solving Classes, Designing Course Materials and Exams, Grading Assignments

### Computer-Aided Digital System Design

Dr. Hossein Aghababa

Feb. 2023 - Jul. 2023
University of Tehran

- Language: Verilog
- · Responsibilities: Holding Practice Solving Classes, Designing Course Materials and Exams, Grading Assignments

### **Advanced Programming**

Dr. Zahra Movahedi

Feb. 2022 - Jul. 2022
University of Tehran

- · Language: Java
- · Responsibilities: Helping Students with Coding, Grading Projects and Assignments

#### WORK EXPERIENCES

## Research Assistant at the Deep Learning Laboratory of the University of Tehran

mar. 2023 - Present

Deep Learning Lab

**?** Tehran, Iran

 Working on text analysis in social networks by collecting posts and comments by crawling in nets, then analyzing their sentiments.

### **Machine Learning Intern**

**m** May. 2022 - Aug. 2022

Buyroad - Internship

**Q** Tehran, Iran

- · Worked on a retrieval-based chatbot using BiLSTM and BERT algorithms. (Source Code)
- · Worked on a search engine using Elasticsearch and BERT algorithm. (Source Code)

### **ACADEMIC PROJECTS**

**Text Summarization** 

**iii** Jun. 2023

University of Tehran

· An abstractive Text Summarization fine-tuning on the T5 transformer model on the xsum dataset. (Project link)

Chatbot

**#** Feb. 2023

University of Tehran

· Open-domain generation-based chatbot using large language models such as T5, Falcon7B, and Llama7B with the Reddit dataset. (Project link)

Sentiment Analysis

**iii** Jul. 2022

University of Tehran

· A sentiment analysis system that can classify the sentiment of customer comments as positive, negative, or neutral. The project involves scraping Amazon product reviews, building sentiment analysis systems with lots of algorithms, and computing their accuracy. (Project link)

**Machine Translation** 

**m** May. 2022

University of Tehran

· A machine translation system that translates text from Persian to English and English to Persian using attention and transformers. (Project link)

**News Text Classification** 

Feb. 2022

University of Tehran

· Persian news text classification from Hamshahri corpus based on Bidirectional LSTM. (Project link)

### **SELECTED COURSE PROJECTS**

### Finding Lane Lines on the Road

**iii** Jul. 2023

Foundations of Computer Vision

University of Tehran

· A Python implementation for lane detection using the OpenCV library. It uses the Hough Transform algorithm to detect lines in video frames and draw the final lane lines on the original frames. (Project link)

Cars Parking AI

**ii** Jun. 2022

Artificial Intelligence and Expert Systems

University of Tehran

· Used a\* algorithm to automatically find path to control parked cars with AI. (Project link)

### OS Scheduling Simulation

**m** Dec. 2021 Operating Systems University of Tehran

- Simulated CPU scheduling with FCFS, RR and Preemptive/Non-Preemptive Priority/SFJ algorithms.
- Used a graphical interface to work with the program and plotted metrics such as waiting, turnaround and response time of CPU simulation (Project link)

### **Bank System**

**iii** Jun. 2020 University of Tehran

Advanced Programming

 $\cdot$  This is a Java-based banking system with a GUI developed using JavaFX. It allows users to create accounts, deposit/withdraw money, and view their account information. (Project link)

#### **SKILLS**

### AI Professional Skills

- Python (TensorFlow, PyTorch, Keras, Scikit-Learn, NumPy, Pandas, Matplotlib)
- Machine Learning
- Deep Learning (ANN, CNN, RNN, LSTM, GAN)
- Natural Language Processing (Transformers, LLMs)

## **Programming Skills**

- C++, Java, JavaScript, TypeScript
- Django, SQL, MongoDB, Redis, ElasticSearch, Kafka

- Web Scraping (Scrapy, Beautifulsoup)
- Docker, Git, Linux (Ubuntu)

### Language Skills:

- Persian (Native)
- English (Fluent)
- Duolingo English Test score (120)

### Other Skills:

- Methodologies (Agile, Scrum, Waterfall)
- Product Management Tools (Jira, Trello)
- LaTeX, Word, PowerPoint, Excel

#### TRAINED COURSES

### **Deep Learning**

- University of Tehran
- **iii** Jun. 2023

### Natural Language Processing with Deep Learning

- Youtube Stanford CS224N
- **M**ay. 2022

### Convolutional Neural Networks

- Coursera
- Mov. 2021

#### Machine Learning, Andrew Ng

- Coursera
- **E** Sep. 2021

#### VOLUNTEER WORKS

### IPRIA 2023 Conference Executive Team

**III** Jan. 2023 - Feb. 2023

• The 6th International Conference on Pattern Recognition and Image Analysis (IPRIA 2023) which was Held in the Department of Computer Engineering, University of Tehran (Certification)

#### REFERENCES

• Dr. Kazim fouladi: kfouladi@ut.ac.ir

• Dr. Hossein Aghababa: aghababa@ut.ac.ir

• Dr. Zahra Movahedi: zmovahedi@ut.ac.ir