Setareh Babajani



Education

IUST University (among the top 4 universities in Iran)

B.Sc. in Computer Science at Iran University of Science & Technology

Tehran, Iran 2020 - Feb 2025

- GPA of the Last Two Years: 4.0/4.0 (18.5/20.0 on the Iranian Scale)
- Overall GPA: 3.98/4.0 (18.3/20.0 on the Iranian Scale)
- Ranked among top 5% GPA in my class
- Selected Courses (on the Iranian Scale): Natural Language Processing: 18.32, Artificial Intelligence: 17.54, Deep Learning: 20, Computer Vision: 17.88, Signals and Systems: 19.5, Computer Networks: 17.1

Farzanegan High School

Mazandaran, Iran

Diploma in Mathematics and Physics

2016 - 2020

- Grade: 19.90/20.0

Research Interests

• NLP • Deep Learning

Machine Learning

Computer Vision

• Generative Models

• Recommender Systems

• Graph Neural Networks

Research Experience

Natural Language Processing Research Assistant in NLP Laboratory

IUST

Bachelor Thesis, School of Computer Engineering

April 2024 - Present

- Supervisor: Dr. Sauleh Eetemadi
- Using RAGs in medical field.

Natural Language Processing Intern

IUST

Summer Internship

Jun 2023 - Sep 2023

- Supervisor: Dr. Sauleh Eetemadi
- Worked on the "Visual Dialog in the medical field" project.
- Implemented different Encoder-Decoder Models and Attention Mechanisms using Keras & tensorflow.

Skills

- Programming Languages: Python, Java, C, C++, C#, JS, SQL, HTML, CSS
- Libraries and Frameworks: Pytorch, Keras, TensorFlow, Scikit-Learn, Numpy, React JS
- Environments and Tools: Git, Postman, Azure Devops, Linux (Ubuntu)

Teaching & Academic Experience

Teaching Assistant

IUST

School of Computer Engineering

Oct 2022 - Jan 2025

- Computational Intelligence Instructor: Dr. Nasser Mozayani Fall 2024
- Artificial Intelligence Instructor: Dr. Mohammad-Reza Mohammadi Fall 2024
- Software Engineering Instructor: Dr. Behrouz Minaei-Bidgoli Fall 2024
- Compilers Instructor: Dr. Saeed Parsa Fall 2023
- Fundamentals of Programming Instructor: Dr. Sauleh Eetemadi Spring 2022
- Fundamentals of Programming Instructor: Dr. Mehrdad Ashtiani Fall 2024
- Fundamentals of Programming Instructor: Dr. Marzieh Davoodabadi Farahani Spring 2023
- Advanced Programming Instructor: Dr. Sauleh Eetemadi Fall 2022
- Algorithms Design Instructor: Dr. Farzaneh Ghayour Baghbani Fall 2024

Academic Projects

IUST NoWaste

System Analysis and Design Course Project

Winter 2022

- It's an application for preventing the wastage of unsold food in restaurants and cafes.
- The application was developed with Scrum Methodology and I contributed to the front-end of it.
- Frontend is implemented with React JS. GitHub
- Backend is implemented with Django. GitHub

Anti-Spoofing algorithm for checking the liveliness of faces in videoes

IUST

Computer Vision Course Project - GitHub

Spring 2024

- The project was for checking whether a face in the video is alive or not.
- In this project, two different models, including a feature-based and a deep learning model, were used.
- For the feature-based model, SVC was used.
- For the deep moodel, VGG16 and some extra un-pretrained layers were used.
- The data came from CASIA-FASD.

Sentiment Analysis in Persian texts

IUST

Deep Learning Course Project - GitHub

Winter 2024

- In this project, DistilBert model was used.
- In this project, different pre-processing methods like normalization, stemming, spell checking, and vectorization were used.
- The data came from ArmanEmo dataset.

RAGs IUST

NLP Course Project Spring 2024

- The first RAG project is for Chatbot for a website's FAQ which compares the result of three different generative models. **GitHub**
- The second RAG project is for organizational reports which use gpt2 in generation time. GitHub

Theory of Languages and Automata Proejcts

IUST

TLA Course

Winter 2021

- Implementing turing-machine. GitHub
- Implementing PDA-calculator. GitHub
- Implementing string-belongs-to-finite-automata. GitHub

Honors & Certificates

Among the top 5% in my class in GPA (last two years:18.5/20, 18.3/20 overall)

Sep 2020 - Present

School of Computer Engineering, IUST

- Class of about 100 students

Ranked Within the Top 0.7% in Iranian University Entrance Exam

July 2020

Mathematics and Physics majors

Deep Learning Specialization

Sep 2023

Certificate on Coursera.org

- Includes courses on Neural Networks and Deep Learning, Machine Learning, Convolutional Neural Networks, Sequence Models

Deep Learning and Trusworthiness in Deep Learning

Aug 2024

Certificate on Sharif University of Technology

- Covers many topics in Machine Learning, Deep Learning and trustworthiness in Deep Learning.

Natural Language Processing with Classification and Vector Spaces

Certificate on Coursera.com

Sep 2023

- Covers many topics in NLP and Data Preprocessing using Python.

Convolutional Neural Networks

Certificate on Coursera.com

Aug 2023

- Covers many topics about CNNs, object detection and face recognition.

Algorithms on Graphs Mar 2022

Certificate on Coursera.org

- Includes courses on graphs, MST and ASP.

Dec 2021

Certificate on Coursera.org

- Includes courses on different data structures, hash tables and BST.

Algorithmic Toolbox Nov 2021

Certificate on Coursera.org

- Includes courses on greedy algorithms, divide-and-conquer algorithms and dynamic programming.

Languages

• Persian: Native speaker

• English:

- IELTS: Overall: 7, Reading: 8, Listening: 7.5, Speaking: 6.5, Writing: 6.5

Membership

Volunteer Member of Computer Engineering Scientific Association

IUST

School of Computer Engineering

Jan 2023 - May 2024

- CESA LEARN: Assisting in the organization of academic courses

References

Dr. Sauleh Eetemadi Iran University of Science & Technology - University of Birmingham

Assistant Professor at Department of Computer Engineering

- Email: s.eetemadi@bham.ac.uk

Dr. Behrooz Minaei-Bidgoli Iran University of Science & Technology

Professor at Department of Computer Engineering

- Email: b_minaei@iust.ac.ir

Dr. Mehrdad Ashtiani Iran University of Science & Technology

Assistant Professor at Department of Computer Engineering

- Email: m_ashtiani_AT_iust.ac.ir

Dr. Marzieh Davoodabadi Farahani Iran University of Science & Technology

Assistant Professor at Department of Computer Engineering

- Email: ma.davoodabadi.at.gmail.com