

SUMMARY

Being a Passionate student of Computer Science, I am motivated to enhance my knowledge in machine learning and data mining. Through my studies and work experiences, besides academic knowledge, I have developed many skills such as project conduction, critical thinking, and conflict resolution.

EDUCATION

- University of Tehran** Tehran, Iran
Bachelor of Computer Science Sep 2019 - Present
 - GPA: 18.16/20 (Overall: 3.85, Last two years: 4/4)
 - Thesis: Gift Recommendation Systems:
 - Reviewing psychological, marketing, and anthropological literature related to gift exchange in order to 1) give a clear understanding of this practice and 2) offer a framework for gift recommendation systems
 - Reviewing gift recommendation systems literature and examining their adherencies to the provided framework
 - Introducing a novel personality-based gift recommendation system adhered to the reviewed literature
- Minor in Entrepreneurship*
 - GPA 19.29/20 (Overall: 4/4)
- Salam High School** Tehran, Iran
High School Diploma in Mathematics and Physics Sep 2016 - Sep 2019
 - GPA: 19.54/20 (Overall: 4/4)

RESEARCH INTERESTS

- Deep Learning
- Semi-Supervised Learning
- Computer Vision
- Music Generation
- GNNs
- Finance

SKILLS SUMMARY

- Programing Languages:** Python, C++, Assembly, C#, R, SQL
- Frameworks & Tools:** Flask, FastAPI, ASP.Net, Git, Scikit-learn, TensorFlow, Keras
- Typescript Languages:** L^AT_EX, HTML, Word/Office, Excel/Office

RELEVANT COURSEWORK

- Deep Learning (20 out of 20)
- Artificial Intelligence (20)
- Advanced Information Retrieval (20)
- Scientific Writing (20)
- Data Structures & Algorithms (18.12)
- Design & Analysis of Algorithms (18.50)
- Linear Algebra (18.6)
- Compiler (19.16)

EXPERIENCE

- Physics Data & Astronomical Technology (PDAT) laboratory** Tehran, Iran
Part-time Researcher Aug 2022 - Dec 2022
 - Languages & Softwares:** Python, L^AT_EX, Git, Django, Docker
Researching in Quantum Computing and Machine Learning Algorithms. Resulting in conducting Quantum Neural Network machine learning algorithms.
- Borhan Credit Rating** Tehran, Iran
Part-time Junior Data Analyst Dec 2021 - Dec 2022
 - Learned Software & Frameworks:** Flask, Docker, Excel, Git, REST API
 - Work Results:** Developed a program that rates investment funds based on the company's methodology that saves almost 5,000\$ annually. This program has a dashboard to visualize the outputs and interacts using web server protocols. Developing a Supervised Learning Model for predicting the possibility of a bank borrower's default. The model is trained on the Melal Credit Institution database.
- Borhan Credit Rating** Tehran, Iran
Junior Developer (Part-time) - Internship Mar 2021 - Dec 2021
 - Learned Languages & Frameworks:** C#, React, HTML, CSS, ASP.NET, Microsoft Power BI
 - Work Results:** Built a dashboard -visualizing the progress of different contracts- with Power BI and a webpage for itemizing fund rank results with ASP.NET & React.

PROJECTS

- **Cool Compiler (Compiler Course):** Spring 2022
Developed lexical, parsing, and semantical analyzing phases of a compiler for the Cool language introduced in Stanford's Compiler course. Tech: C++, Bison, FLEX
- **Assembler & Disassembler (Machine Language and Assembly Course):** Spring 2022
Developed Assembler & Disassembler for a restricted 8086 Assembly language supporting more than 25 instructions. Programs were developed in both Python and Assembly Languages. Tech: Python, 8086 Assembly
- **Image processing (Data Mining Course):** Spring 2022
Developed different machine learning models for grapes' leaves classification. Many approaches are taken to achieve better accuracy, such as transfer learning, augmentation, PCA, and ensemble methods. Tech: Python, TensorFlow, Keras
- **Analysis of Packaging Industry (Business Environment in Iran Course)-A Group Project:** Spring 2022
Prepared an analysis report for the Printing & Packaging Industry in Iran. Contains an analysis of the macro-environment of the industry and Porter's Five Forces of Competitive Position, followed by a Business Model for an innovative idea
- **Scheduling Algorithms Statistical Comparison (Fundamentals of Operating Systems Course):** Fall 2022
Conducted a statistical comparison between different Operating System Scheduling Algorithms by implanting them with Python on a suitable range of inputs. Many criteria were used during the comparison. Tech: Python
- **Natural Language Processing (Advanced Information Retrieval Course):** Fall 2022
Developed a supervised learned model for recognizing E-zafe in Farsi sentences. Many state-of-art models were used to achieve the best results. Tech: Python
- **Basic Computer (Principals of Computer Systems Course):** Spring 2021
Developed a basic computer whose instructions are introduced in the Digital Design book by Morris Mano. The computer was built with classical gates, and programs can be run from its RAM. Tech: Logisim
- **Predicting House Prices (Statistical Methods Course):** Spring 2021
Developed a supervised machine learning model using an ensemble of classical machine learning algorithms. Tech: R
- **Hospital Database (Database Management Systems Course):** Fall 2021
Modeled a database for a hospital with Enhanced Entity Relationship Diagram, standardized the diagrams using Normal Form methods, and implemented them via Microsoft SQL Server. Tech: SQL
- **Leslie Matrix Research (Linear Algebra Course):** Fall 2021
Conducted research on Leslie Matrix and its usage, estimated Iran's population using population distribution, then presented in the class.
- **Messaging Program (Advanced Programming Course):** Spring 2021
Developed a messaging program containing registration, posting, replying, commenting, and liking. The program uses a terminal as the interface. Tech: C++
- **NoteBook (Fundamentals of Computer Science and Programming Course):** Fall 2020
Developed an advanced interactive notebook that used a terminal as the interface. The notebook has Cursor, Line Hider, and it can compile some JSON-coded instructions. Tech: Python

HONORS AND AWARDS

- Top 0.5% at National University Entrance Exam (rank: 291)

LANGUAGES

- *Farsi: Native Speaker*
- *English: Fluent*