

Danial Chekani



Tehran, Iran



+98 939 1165361



LANGUAGES

Persian

Native Language

English

Professional Working Proficiency

RESEARCH INTERESTS

- Machine Learning
- Natural Language Processing
- Data Mining
- Bioinformatics
- Computer Vision
- Graph Theory

TEST SCORES

IELTS Academic Test

21 Aug 2023

- Band Score : **8.5**

Listening: 9 Reading: 9

Writing: 7.5 Speaking: 7.5

GRE General Test

24 Oct 2023

- Overall Score : **320**

Quantitative: 170 Verbal: 150

EDUCATION

Bachelor of Science (B.S.) In Computer Engineering

K.N.Toosi University of Technology, Tehran, Iran

2019 - Expected Graduation Jan 2024

GPA: 3.80/4 – 17.81/20

RESEARCH & TEACHING ASSISTANT

- Fall 2023, Research Assistant,
Instructor: Dr. Farnaz Sheikhi - f.sheikhi@kntu.ac.ir
Collaborating on research to detect depression through AI analysis of social media using eRisk dataset
- Spring 2023, Teacher Assistant, *Course*: Operating Systems
Instructor: Dr. Hamed Khanmirza - h.khanmirza@kntu.ac.ir
Prepared and graded assignments and projects, and helped students with course content
- Spring 2023, Teacher Assistant, *Course*: Hardware Software Codesign
Instructor: Dr. Hoda Roodaki - hroodaki@kntu.ac.ir
Hosted classes, prepared and graded assignments and projects, and helped students with course content using SystemC
- Spring 2022, Teacher Assistant, *Course*: Advanced Programming
Instructor: Dr. Mehdi Esnaashari - esnaashari@kntu.ac.ir
Hosted classes, prepared and graded assignments, and helped students with course content using Java

RELEVANT COURSES

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| Advanced Programming: 20/20 | Database: 20/20 |
| Operating Systems: 20/20 | Software Engineering: 20/20 |
| System Analysis & Design: 20/20 | Algorithm Design: 20/20 |
| Foundations of Speech & Language Processing: 19/20 | Data Mining: 18.75/20 |
| | Artificial Intelligence & Expert Systems: 18.75/20 |

ACADEMIC ACHIEVEMENTS

- Secured admission to one of Iran's premier industrial universities, ranking among the top 1% of the candidates.
- Attained a distinguished standing within the university, achieving placement in the top 15% of a cohort of 95 individuals

ACADEMIC PROJECTS & RESEARCH

Depression Detection on eRisk 2017 Using LSTM Models

Supervisor: Dr. Farnaz Sheikhi

Utilized deep learning methods such as LSTM, GRU, and their Bi-Directional and hybrid versions to predict depression on eRisk 2017 users. We extracted several features from a collection of 478,000 Reddit posts and 887 users to create the dataset and evaluated and compared different models' performance. Our methods and models reached superior results compared to previous works

ETH Price Prediction Using Social Sentiments

Supervisor: Dr. Masoud Dehyadegari

Developed a machine learning project as my Bachelor's thesis project to predict Ethereum price value by amalgamating sentiment analysis data from Twitter and Reddit, processed using the Vader library, combined with Ethereum hourly candles to create a dataset. Utilized TensorFlow to build and train a predictive model based on the combined dataset, aiming to correlate sentiment trends with Ethereum price movements.

Huristic Methods of Solving Traveling Salesman Problem

Supervisor: Dr. Farnaz Sheikhi

As part of a team, we applied varied heuristic techniques to solve the TSP problem, testing them on real-world data to assess execution time.

SKILLS

- Programming Languages: Java, C#, Python, C, Assembly, VHDL, Typescript/JS
- Machine Learning Framework: TensorFlow, Keras, Scikit -learn
- Responsive Web Application Development
- Front-End Programming & UI Design: HTML5, CSS3, ReactJS - Semantic UI, MUI, & Bootstrap libraries
- Back-End Programming: Asp.net Core, C#
- Source and Version Control: Git, GitHub
- Multi-Layer Architecture: MVC, CQRS & Mediator
- SQL and database providers such as SQL Server, PostgreSQL

PROFESSIONAL DEVELOPMENT COURSES

- Python Programming
- Neural Networks and Deep Learning
- ASP.NET Framework MVC
- Supervised Machine Learning: Regression and Classification
- Sequence Models and Deep Learning
- Full-Stack Web Application with ReactJS, ASP.NET Core & TS

WORK EXPERIENCE

Full-Stack Developer

May 2022 – Jun 2023 **Freelance**

Created E-Commerce and social media websites from scratch using ReactJS and Asp.net Core as front-end and back-end frameworks respectively and Used Mediator and CQRS design patterns to achieve a clean 5-layered architecture

Windows Application Developer

Dec 2021 – Mar 2022 **Freelance**

Created a GUI interface for communicating to a Matlab project using JavaFX. Built multiple Windows applications using C# windows forms with access to SQL database..