ALI SHOKOOHI TARGHI

Tehran, Iran | Phone Number | Email | Personal Page

About Me

I am a passionate computer engineering student with a strong interest in software development, machine learning, data analysis and cyber security. My academic journey at Iran University of Science and Technology has equipped me with skills in problem-solving, programming, and teamwork. Through hands-on projects, I have gained expertise in creating innovative solutions, from building complex trading algorithms to designing secure systems and web applications. I strive to apply my technical and analytical abilities to impactful real-world challenges while continuously exploring new technologies and methodologies.

Experience

Software Developer Intern | Megamouj-e Iranian

Jul 2024 - Sep 2024

- Designed and developed software applications using C#.
- Learn Windows Forms applications in C#.

Software Developer | Megamouj-e Iranian

Sep 2024 - Nov 2024

- Designed and developed software applications using C#.
- Enhanced code efficiency and functionality to meet project requirements.

Teaching Assistant | Iran University of Science and Technology

Sep 2024 – Feb 2025

Assisted in the "Data Communication" course under Professor Marzieh Sheikhi.

Education

Iran University of Science and Technology | BS Computer Engineering

2021 - present

Certifications

- C# for .NET Developers Coursera (<u>link</u>)
- SQL 365 Data Science (link)
- Advanced SQL 365 Data Science (<u>link</u>)
- Advanced SQL for Data Engineering 365 Data Science (link)
- Git and GitHub 365 Data Science (link)
- Intro to LLMs 365 Data Science (link)
- The Machine Learning Algorithms A-Z (<u>link</u>)
- Machine Learning in Python 365 Data Science (link)
- Machine Learning with Decision Trees and Random Forests 365 Data Science (link)

Skills & abilities

Software Development

- Programming: C, C++, C#, Python, TypeScript, JavaScript
- Back-End Development: ASP.NET Core
- Front-End Development: React.js, HTML, CSS, TypeScript, JavaScript
- Databases: PostgreSQL, Microsoft SQL Server

Cybersecurity and Computer Networks

- Cryptography: Symmetric Encryption (AES, DES), Asymmetric Encryption (RSA, DH)
- Scripting: Bash Scripting for security automation and task management
- Penetration Testing: Basic vulnerability assessments and ethical hacking concepts
- Operating Systems: Linux (Ubuntu, Kali) for secure server setups and network configurations
- Security Protocols: SSL/TLS, Secure Shell (SSH), IPSec

Machine Learning & Data Science

- Supervised Learning: Decision Trees, Random Forests, Linear Regression
- Unsupervised Learning: Clustering, PCA
- Data Visualization: Matplotlib, Seaborn, Plotly

Embedded Systems: Arduino, ESP32, Proteus

Methodologies: Scrum, Agile

Other Technical Skills

- Version Control: Git, GitHub
- Cloud & DevOps: Docker, CI/CD Pipelines
- Microsoft Office
- Adobe Photoshop

Languages

English: Proficient

Persian: Native

Projects

Computer Security | GitHub

- Implemented cryptographic algorithms for secure communication and authentication.
- Designed and tested encryption techniques for data protection.
- Tools & Technologies: Python, Cryptography, OpenSSL, RSA, AES, Linux, Bash Script, Qt.

Trading Algorithm | GitHub

- Developed a cryptocurrency portfolio optimization algorithm using time series analysis.
- Implemented the Black-Litterman model for portfolio management.

- Enhanced trading strategy using volatility prediction techniques.
- Tools & Technologies: Python, Pandas, NumPy, Scikit-learn, Backtrader, Trading View, Pine Script, Matplot.

Reactivities | GitHub

- A full-stack social networking platform enabling event-based interactions.
- Features include real-time messaging, notifications, and user authentication.
- Tools & Technologies: C#, .NET, Entity Framework, PostgreSQL, React.js, TypeScript, Semantic UI

DSL | GitHub

- Designed a Domain-Specific Language (DSL) for automated data analysis.
- Developed syntax and parsing logic for user-friendly scripting.
- Tools & Technologies: Python, ANTLR, Pandas, AST Parsing.

Expenses-Management | GitHub

- A web-based expense tracking application for personal and business finance management.
- Integrated budget forecasting and visualization tools.
- Tools & Technologies: React, TypeScript, Vanilla CSS.

GPT3-Landing-Page | GitHub

- A modern, responsive landing page for showcasing Al-powered GPT-3 features.
- Tools & Technologies: React.js, Bootstrap, SCSS.

IUST-LC-Final-Project | GitHub

- Designed a Library management system digital logic circuit using Proteus for sequential and combinational logic operations.
- Implemented flip-flops and state machines for data processing.
- Tools & Technologies: Proteus, Logical Circuits.

VGA-ESP32 | GitHub

- Developed an attendance system interface displayed via VGA using an ESP32 microcontroller.
- Implemented MQTT communication between the server and client.
- Tools & Technologies: ESP32, Bitluni, LVGL, MQTT, Arduino, C++.

Data Science Final Project | GitHub

- Implemented machine learning models to predict movie box office revenue.
- Conducted EDA (Exploratory Data Analysis) on movie datasets.
- Used Random Forest Regressor and Linear Regression for revenue prediction.
- Tools & Technologies: Python, Pandas, NumPy, Seaborn, Scikit-learn, Matplotlib, Plotly.

Concertify | GitHub

- A concert ticket aggregation platform consolidating listings from multiple sources.
- Features a web scraper for automated data collection.
- Tools & Technologies:
- Frontend: React, TypeScript, MUI, Bootstrap, Unit Tests, Docker.
- Backend: C#, ASP.NET Core, PostgreSQL, Docker, Swagger UI, Entity Framework Core, Docker, CI/CD, Unit Tests, Asynchronous Programming, Clean Architecture, SOLID, Data Transfer Object (DTO).

Eventify | GitHub

- An event management platform allowing users to host and attend events.
- Includes integrated chat and ticketing features.
- Tools & Technologies:
- Frontend: React, JavaScript, MUI, Bootstrap.
- Backend: Python, Django, MySQL, RESTful APIs, CI/CD.