Amir Gholizad | Software Engineer

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PROFILE

Physicist and Software Engineer with a Master's degree in Physics and a Software Engineering background. Experienced in developing full-stack web applications and applying analytical problem-solving techniques to create innovative solutions. Passionate about bridging the gap between science and technology to build impactful, scalable systems.

SKILLS

Front-end: HTML, CSS, Sass, JavaScript, React.js, Node.js

Back-end (REST APIs): Python (FastAPI), JavaScript (Express.js, Axios)

Other: C, C++, Pandas, Numpy, Matplotlib, Seaborn, Scikit-learn, Tensorflow, PostgreSQL, MySQL, JSON, RDS, Linux, Git, Bash, Docker, AWS, NginX

PROJECTS

BEAT: AI-Powered Financial Monitoring Dashboard

FEB 2024 | BrainStation Capstone Project

- Built a financial asset tracking dashboard using an Express.js local server and a MySQL database.
- Integrated an LLM model to generate real-time insights and feedback on assets based on the latest market news.

Python RESTful API with CRUD Operations

APR 2024 | FreeCodeCamp API Development Course

- Developed a RESTful API with CRUD operations using FastAPI and PostgreSQL for database management.
- Deployed the API on an EC2 instance using Docker for containerization and Nginx.

EDUCATION

BrainStation | Diploma, Software Engineering

NOV 2024 - FEB 2025, Online, Canada

Amazon Web Services | Certification, Cloud Practitioner

Valid thru 2027, Online

Memorial University of Newfoundland (MUN) | Master of Science, Physics

SEP 2022 - SEP 2024, St. John's, NL, Canada

Amirkabir University of Technology | Bachelor of Science, Physics

SEP 2016 - SEP 2021, Tehran, Iran

EXPERIENCE

Researcher | Dep. of Physics and Oceanography, MUN

SEP 2022 - SEP 2024, St. John's, NL, Canada

- Analyzed potential functions derived from market data using technical analysis.
- Estimated probability density functions using Kernel Density Estimation.
- Built and tested Technical Analysis-based indicators for potential functions.