Matthew Mirza

US Citizen | Framingham, MA | (508)-808-9172 | mirza.ma@northeastern.edu | github.com/Mmirza964 linkedin.com/in/matthew-mirza | matthew-mirza-portfolio.netlify.app | Availability: May - September

Education

Northeastern University – Khoury College of Computer Sciences (GPA: 3.656/4.00)

Candidate for B.S. in Computer Science and Business + M.S. in Computer Science (4+1)

Sep 2023 – May 2027

- Concentration: Financial Technology Minor: Computational Data Analytics
- Related Coursework: Algorithms (MS), Object-Oriented Design, Database Design, Fundamentals of CS 1 & 2, Statistics and Software
- Honors: Dean's List: Fall 2023, Spring 2024, Fall 2024

Skills and Certifications

- Languages: Java, JavaScript, Typescript, HTML/CSS, Python, SQL
- Tools/Frameworks: Git, React, React Native, Node.js, Flask, Pandas, Power BI, Snowflake, IICS, Docker
- Certifications: Microsoft Azure Data Fundamentals DP-900

Experience

Dana Farber Cancer Institute

Boston, MA

Data Engineering Co-op

January 2025 - Present

- Developed a Python-based ETL pipeline that extracted metadata from IICS API endpoints, transformed and formatted data using Pandas, inserted into Snowflake tables, and automated data quality checks, reducing manual validation.
- Designed Snowflake stored procedures to efficiently parse, process, and distribute metadata into respective tables streamlining discrepancy detection between QA and production environments.

The Village Bank

Newton, MA

Personal Banker II / Core Systems Intern (Summer 2023)

July 2021 - Present

- Conduct teller transactions including cash handling, check deposits, withdrawals, and account inquiries with accuracy.
- Collaborated with the project manager to lead the integration of third-party software into the organization.

Projects

Mr. Speed App (SQL, Python, Typescript, React Native, Docker)

- Engineering a backend using FastAPI, integrated with MySQL and containerized using Docker, to streamline ride scheduling and organize business operations, enabling the business to efficiently scale with increased customer demand.
- Developing a responsive React Native app using TypeScript and Expo Go, integrating Google Maps API for route information, OAuth authentication for driver management, analytics dashboards for company performance monitoring.

Husky Hacks (Python, Streamlit, Flask, Docker, SQL)

- Built a web app in Streamlit for students and alumni where they can share programming projects and engage in modules aimed at teaching users languages and frameworks to use in future jobs.
- Developed a REST API using Flask and a relational database using SQL. Containerized the back end, web app, and database using docker.

Web Chat App (Node.js, React.js, Next.js, Javascript)

- Built a web chat app similar to Omegle with a type-safe user interface and server-size rendering utilizing Next.js.
- Developed the backend with Node.js and JavaScript, using Express to host an HTTP server and enable WebSocket communication for real-time chat functionality, managing user sessions, and maintaining chat logs for data persistence.

Activities

Oasis Club Mentor

Sep 2024 – Present

• Mentor of a selective project-based club. Advised multiple groups of four to five students on a full stack application of their choice.

ReNU Club (C / C++, Arduino IDE)

Sep 2024 – Present

• Contributed to the development of software for controlling key windmill components for a prototype windmill designed for a national collegiate competition hosted by the U.S. Department of Energy in 2025.

Interests

• Soccer (FC Barcelona), Weightlifting, Cars, Aviation, Travel, Stocks, Real Estate, Data Science, Machine Learning