

Mostafa Kamal

Cambridge, MA • mostafajunayed20@gmail.com • 857-829-9226
www.mostafakamal.net • [linkedin.com/in/mostafak2](https://www.linkedin.com/in/mostafak2) • github.com/mostafak2

EDUCATION

University of Massachusetts Amherst

B.S. Computer Science, Minor in Business, GPA 3.47

Year of Graduation: May 2023

Coursework: Data Structures & Algorithms, Software Entrepreneurship, Theory and Practice of Software Engineering, Computer Networks, Discrete Mathematics, Digital Forensics, Search Engine

TECHNICAL SKILLS

Languages: Python, Java, JavaScript, C#, HTML, CSS

Libraries/Frameworks: Spring, Flask, React, React Native, Node.js, Next.js

Databases: MySQL, DynamoDB, MongoDB

Tools/Misc: JPA, Git, Figma

PROJECTS

Weout - Local Event Exploration

- Developed a local event and location exploration application using React Native, Node.js, and Firebase, featuring OpenAI to provide recommendations
- Developed a dynamic feed integrating with the Firebase backend for showcasing users' posts and secured the application via 2FA
- Leveraged OpenAI along with Google Places API to generate location suggestions tailored to user inputs
- Worked collaboratively with other developers to help with overall system and database design

Full-Stack Elevation-Based Navigation System

- Implemented a navigation system using React, OpenStreetMap API, and Flask, integrating elevation data for diverse types of elevation inputs
- Utilized A* and Dijkstra to find the shortest path with the desired elevation
- Achieved consistent runtime performance with OSMnx Shortest path function, maintaining an average fluctuation of 0.0021 seconds
- Conducted integration and unit tests to verify app readiness for deployment with a 70% code coverage

Full-Stack Chat App

- Built a dynamic chat app with React, Spring Boot, and Mavin plugin supporting private and group chats
- Employed MVC design pattern in developing REST API for managing CRUD operations in the database and used JPA for executing SQL queries
- Encrypted and secured the messages sent between users via Spring security modules and created authentication services using JWT
- Used Websockets to handle dynamic browser and server communication for instant messages

EXPERIENCE

Outlier AI | Prompt Engineer

February 2024 - July 2024

- Developed data science to machine learning prompts, addressing model response failures by refining or rewriting model responses
- Handled challenges such as multi-table joins, nested subqueries, and complex aggregations to extract relevant information
- Crafted prompts to induce flaws in model responses with a 93.58% success rate across topics from data structures to machine learning
- Provided coder instructions to the model for an advanced data-science project to guide the LLM to a correct output
- Collaborated with other reviewers to review other attempters' tasks to validate and rate for best quality tasks

CERTIFICATIONS

Machine Learning Specialization by Andrew Ng