Mostafa Kamal

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EDUCATION

University of Massachusetts Amherst

B.S. Computer Science, Minor in Business, GPA 3.47   *Graduated   05/2023*

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

Certification: Machine Learning Specialization by Andrew Ng - In progress

TECHNICAL SKILLS

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

Web Technologies: Spring Framework, Flask, HTML, CSS, React, React Native

Database Programming: MySQL, DynamoDB, JPA

Software Development Tools: Eclipse, VS-Code, Git, Maven, Jenkins, Figma

EXPERIENCE

Stealth Startup | Part-Time Software Engineer | January 2024 - Present

- Led the development of a dynamic landing page, incorporating animations and forms with React.js, while utilizing Node.js and AWS DynamoDB to efficiently store user data
- Collaborated with the design and development team to integrate Google Maps API and Places API to create an interactive map with real-time places information
- Successfully managed the entire software development lifecycle (using Agile methodology) for multiple applications, ensuring timely delivery and high-quality

PROJECTS

Full-Stack Elevation-Based Navigation System | February 2023 - May 2023

Implemented a navigation system that utilizes elevation information, allowing for diverse types of elevation inputs

- Created a full-scale web app featuring a client-side react app integrated with the OpenStreetMap API and powered by a Flask backend
- Utilized A* and Dijkstra to find the shortest path and desired elevation
- Compared runtimes, along with osmnx shortest path function, for consistency in evaluation metrics
- Conducted integration and unit tests to verify app readiness for deployment

Full-Stack Chat App | May 2022 - November 2022

Developed a dynamic chat app with React and Spring Boot, 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
- Built the application end-to-end, including client-side React application, backend Java Spring Boot application, and DevOps for building the app using the Maven plugin

Clog Monitor | January 2022 - May 2022

Collaborated with teams on creating an app for monitoring business logs at ISO New England

- Integrated Git into the CI environment with Jenkins and performed continuous testing on a React app using Cypress
- Configured an Apache Tomcat web server and implemented automatic deployment of WAR applications using Jenkins
- Established a complete CI/CD pipeline using Jenkins, ensuring that every commit to main runs the tests, build the app, and deploys to production