Tawsif Mayaz

SKILLS

Languages: JavaScript, TypeScript, HTML/CSS, Python, Java, Objective-C, C++, SQL

Frameworks: ReactJS, React Native, Node.js, ExpressJS, VueJS, AngularJS, Next.js, OpenCV, TailwindCSS, NextJS

Tools: Git, GitHub, PostgreSQL, MySQL, Supabase, Android Studio, Figma, Jira, MS Office Suite, Azure, Mapbox EXPERIENCE

Mhapy | Full-stack Development Intern

Jan 2024 - August 2024

- Developed core functionalities for a patient-therapist matching website using **ReactJS** and **TailwindCSS**, resulting in a **30% increase in user engagement**.
- Connected Mhapy's API using **NestJS** and **ExpressJS** on the backend and leveraged forms to provide personalized therapist recommendations, enhancing user satisfaction and **improving matching accuracy by 25**%.
- Used **PostgreSQL** to manage and query relational databases for storing user and therapist data, ensuring efficient data retrieval and manipulation for over **1000 user records**.
- Used **Figma** to plan and prototype user interface designs, providing clear implementation guidance to ensure a consistent and intuitive user interface, improving accessibility and user experience
- Collaborated with a team of **5 developers** and **2 designers** in an **Agile environment** to integrate **10+ new features**, ensuring seamless functionality and improving overall site performance.

Electrium Mobility | Full-stack Developer

Jan 2024 - Present

- Led the development of an e-commerce platform for renting electric vehicles, utilizing Next.js and Supabase.
- Architected and implemented user authentication and authorization workflows with Supabase, including sign-up, login, and password reset functionalities.
- Directed the design and development of a responsive user interface using **Tailwind CSS**, ensuring an optimal shopping experience across devices.
- Implemented server-side rendering and caching strategies to enhance performance and user experience.
- Oversaw collaboration within the team, leveraging Git and GitHub for version control and project coordination.
 PROJECTS

TerraCustos | React, Mapbox, Supabase, GraphQL

Jan 2025

- Developed a real-time disaster reporting and visualization application using **React**, incorporating interactive map features with **Mapbox** for dynamic visualizations.
- Integrated Supabase for user authentication, and real-time data synchronization.
- Utilized an external GraphQL API to fetch and display live disaster event data.

Handwriting Recognition API | C++, OpenCV, Boost, RESTful API

Oct 2024

- Developed a **RESTful API** using C++, **OpenCV**, and **Boost** for handwritten text recognition.
- Implemented token-based authentication and token bucket algorithm for rate limiting.
- Built endpoints for image upload and text recognition, supporting **JSON** and plain text formats.

PTCG Dex | React Native, Pokemon TCG API

Sep 2024

- Developed a React Native mobile app utilizing the Pokemon TCG API to display Pokemon trading cards.
- Ensured seamless cross-platform functionality using **React Native CLI** with Android and iOS simulators.

Dynamic World Generation - WEC | Python, Turtle, BFS

Jul 2024

- Secured 1st place out of 124 participants at the Waterloo Engineering Competition by developing a Python-based world generation algorithm that utilized Breadth-First Search (BFS) and Dijkstra's algorithm for efficient pathfinding.
- Implemented Turtle graphics to provide an interactive and intuitive representation of the pathfinding process.

Bricks Be Gone | Java, XML, Android Studio

Jan 2024

• Created a classic brick breaker game developed for Android using **Java** and **Android Studio**. EDUCATION

University of Waterloo

Sept 2023 - Present

Bachelor of Applied Science, Computer Engineering

Relevant Courses: Data Structures and Algorithms, Digital Computers, Discrete Mathematics