MUSTAPHA MUHAMMED BOTCHWAY

SOFTWARE ENGINEER | Javascript | Python | React | React Native | MySQL

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CAREER SUMMARY

Software Engineer experienced in building scalable web and mobile applications using React, Node.js, and cloud-based infrastructure. Skilled in integrating LLM-powered AI assistants and REST APIs to improve performance, user experience, and business outcomes.

EDUCATION

Masters of Science in Applied Computer Science	Aug 2022 – Dec 2025
Grand Valley State University	GPA: 3.571
Bachelors of Science in Computer Science	Oct 2012 – May 2016
University of Ghana	

TECHNICAL SKILLS

Javascript, React.js, React Native, HTML, CSS, Media Queries, AJAX, JSON, AWS, Google Cloud, LLM integrations, Python (Pandas, Numpy, Matplotlib, Seaborn), SQL, MySQL, Looker Studio, PostgreSQL, MongoDB, Firebase, PHP, Electron.js, Chart.js, Express.js, Node.js, RESTful API, Git, Machine Learning Algorithms: Linear Regression, Decision Tree, Logistic Regression, Microsoft Office Suite, Photoshop

PROJECTS

GENERATIVE COLLABORATION: AN AI ASSISTANT FOR REAL-TIME IDEATION (Node.js, Express, Sqlite, LLM)
- Built a web app enabling real-time brainstorming through voice and text.
- Integrated LLMs to transcribe speech, generate context-aware ideas, and convert responses back to audio.
- Implemented text embeddings for retrieving relevant past ideas and improving AI suggestions.
- Improved brainstorming idea suggestion and retrieval accuracy by 30%.

Mobile Food Ordering App (React Native, Firebase)
- Designed and built a mobile app that allows restaurant servers to take and manage food orders in real-time.
- Implemented real-time order tracking for kitchen staff to streamline food preparation.
- Enabled customers to scan QR codes to view digital menus and place orders directly from their phones.
- Added functionality for servers to print or email customer receipts instantly.
- Developed a live dashboard for the restaurant owner to monitor transactions and order flow in real-time.

Ecommerce Web Application (React, Firebase, MySQL)
- Built a scalable web platform that allows vendors to sign up and list products for sale.
- Implemented advanced search and filtering features to help customers easily discover products.
- Secured user accounts with two-factor authentication (2FA) to ensure safe access and data protection.
- Integrated Stripe for secure, reliable payment processing and seamless checkout experiences.

PROFESSIONAL EXPERIENCE

Graduate Assistant – GVSU College of Computing (LMS)
Grand Valley State University | January 2024 – April 2025
- Led front-end development of a React-based LMS, integrating APIs and improving user engagement by 35%.
- Collaborated with cross-functional teams to enhance accessibility and responsiveness across devices.
- Collaborated on in-house projects working with different technologies and programming languages like Java.

Software Engineer– Garage Mobility, Ghana
March 2022 – July 2022
- Contributed to the development of a customer-facing web application that streamlined the process of placing business orders
- Collaborated with a team of developers to integrate and test backend APIs for internal applications.
- Focused on improving the user interface of the company's software suite to enhance usability and customer experience.