Muqeeth Mohammad

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WORK EXPERIENCE

Accenture

Software Development Engineer (Full Stack)

09/2018 - 12/2024

- Developed end-to-end features using React and Next.js on the frontend, integrated with Node.js/Express.js RESTful APIs
 and MongoDB, reducing front-end latency by 25% through optimized data flow and component-level performance tuning.
- Built responsive, dynamic user interfaces with React and Next.js, implementing server-side rendering (SSR) and client-side state management with Redux to deliver seamless user experiences across data-intensive applications.
- Designed and implemented API contracts, caching solutions, and database sharding/indexing strategies in MongoDB, achieving a 50% reduction in API response time and significantly improving UI performance.
- Architected and deployed scalable full-stack applications using Next.js (SSR/SSG), Node.js microservices, and Docker containerization, supporting 2,000+ concurrent users with 99.9% uptime.
- Architected event-driven architecture using Kafka for real-time data streaming and BullMQ for async job processing, handling 5K+ messages/hour and reducing system latency by 30% in data-intensive modules.
- Led production incident triage and resolution, conducting 50+ code reviews across the full stack, documenting critical processes, and delivering 20+ knowledge transfer sessions on React best practices and API integration patterns.
- Drove Agile Scrum delivery by facilitating sprint planning and backlog grooming, while contributing to Test Plans that ensured both frontend component testing and backend API validation met stakeholder requirements.

EDUCATION

Master of Science in Computer Info Systems - AI Spec

Indiana Wesleyan University • Indiana, United States

01/2025 - 08/2026

Bachelor's in Computer Science

Osmania University • India

03/2014 - 08/2018

PROJECTS

The Whisk Corner - Full-Stack AI-Powered Web Application

10/2024 - Present

- **Engineered** a responsive and dynamic front-end using **Next.js**, delivering a seamless user experience for browsing and booking custom cakes on **TheWhiskCorner** platform.
- Developed a **Generative AI feature** utilizing a **Retrieval-Augmented Generation (RAG)** pipeline, integrating **LangChain** with a **vector store** to significantly enhance personalized customer support.
- Optimized database performance by implementing MongoDB, achieving a 30% reduction in average query execution time through strategic indexing and schema design.
- **Secured** the platform by integrating robust user **authentication and authorization** features using **JSON Web Tokens** (**JWT**) and seamlessly integrated third-party **payment gateway solutions** for secure transactions.

Agentic React Code Generator (PaaS Architecture)

09/2024 - 01/2025

- Developed a Cursor-style IDE agent utilizing LangChain and LangGraph to create and iteratively optimize React
 applications through a sophisticated, multi-step agentic workflow. Incorporating a human-in-the-loop (HIL) system for
 effective management of complex edge cases.
- **Architected** a dual-database knowledge system combining **Neo4j** (**Graph Database**) for modeling complex relationships in the knowledge graph and **Qdrant** (**Vector DB**) for efficient semantic memory and node indexing.
- **Optimized** system throughput and reliability by integrating **Redis-backed** BullMQ, effectively managing high request traffic and facilitating asynchronous processing for long-running agent tasks.
- **Integrated** a persistent memory layer using **MongoDB** to enable session checkpointing, allowing users to resume complex agentic development and maintain context across multiple sessions.

SKILLS

- Frontend: JavaScript, Next.js, React, Redux, TypeScript
- Backend: BullMQ, Express.js, Kafka, Langchain, Langgraph, Node.js, REST
- Data & Databases: MongoDB, MySQL, Neo4j (Graph DB), Qdrant (Vector DB)
- Infrastructure: Database Indexing/Sharding, Docker
- AI: Agentic Workflows, Python, RAG Pipelines, Vector Databases