Muqeeth Mohammad

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WORK EXPERIENCE

Accenture

Software Development Engineer (Full Stack)

05/2024 - 12/2024

- Engineered a core RESTful API in Node.js/Express.js, optimizing data flow from MongoDB, leading to a 25% reduction in front-end latency and a demonstrably improved user experience.
- **Vetted API contracts and collaborated cross-functionally** with backend engineers, designing caching solutions and implementing sharding/indexing strategies to achieve a **50% reduction in API response time** and improve overall system performance for the UI.
- **Architected and deployed highly scalable, PaaS-style applications** using Node.js and JavaScript frameworks, resulting in a **30% increase in application efficiency** and reliability.
- Implemented **Message Streams** for **real-time data processing** and analytics, significantly improving system responsiveness and enabling dynamic decision-making capabilities by **30%** in data-intensive modules.
- **Triage and managed production incidents** through rigorous maintenance initiatives, including conducting **50+ code reviews**, meticulous documentation of critical processes, and delivering 20+ knowledge transfer sessions.
- Utilized **Docker** for containerization and environment consistency, reducing deployment time by 40% across development, testing, and production phases.
- Drove delivery using **Agile Scrum methodology**, actively facilitating sprint planning, backlog grooming, and contributed to defining **Test Plans** to ensure alignment with 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

TheWhiskCorner - Full-Stack AI-Powered Web Application (Data Visualization Focus)

- **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)

- **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 Bull Queue**, 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 Architecture: CSS3, HTML5, JavaScript, Next.js, Python, React, Redux, TypeScript, UI/UX
- Backend/Distributed Systems: Express.js, Langchain, Langgraph, Message Streams, NextJS, PaaS (Docker), REST/ GraphQL
- Data & Performance: Database Indexing/Sharding, MongoDB, MySQL, Neo4j (Graph DB), Qdrant (Vector DB)