

Mukhil Baskaran

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Professional Summary

Full-stack Software Developer with 3+ years experience delivering scalable, production-ready GenAI systems. Specialized in LLM orchestration (GPT-4, Claude), Agentic AI workflows, and RAG pipelines. Proficient across the SDLC using React/Next.js, Node.js, and Python with CI/CD practices and cloud-native deployment (AWS, Docker, Kubernetes).

EXPERIENCE

FuseGlobal

San Francisco, CA

Founding AI Engineer Intern — Agentic LLM Systems

Spring 2025 – Present

- Joined as one of the first AI engineers, architecting foundational LLM infrastructure and shaping FuseGlobal's GenAI roadmap while collaborating directly with stakeholders to translate domain needs into production-ready features.
- Spearheaded multi-agent LLM orchestration using Google ADK, building modular agent hierarchies with confidence-driven routing and dynamic prompt generation across GPT-4, Gemini, and Deepseek.
- Led development of proprietary RAG pipeline integrating Qdrant with Cohere embeddings, achieving 95%+ retrieval accuracy across 100K+ documents with <300ms latency, plus content chunking pipelines for large-scale document ingestion.
- Built Claude Artifacts-style live doc editor enabling real-time AI editing with user prompts and embedded context windows, demonstrating innovative UI/UX for GenAI applications.
- Engineered full-stack GenAI apps (Next.js + FastAPI) with real-time workflows and state persistence, automating complex consultation logic in enterprise domains.

EMeRG

Calgary, Canada

Freelancer – Data Engineer

Nov 2024 – Jan 2025

- Implemented data pipeline following healthcare industry standards and procedures, utilizing LLMs (OpenAI, Anthropic) for intelligent data extraction while ensuring compliance with established protocols.
- Collaborated with project stakeholders to understand requirements and deliver solutions using React frontend with PostgreSQL backend, improving data accuracy by 35% through iterative development.
- Participated in code reviews and applied feedback to optimize system performance, reducing extraction latency by 40% through improved algorithms and caching strategies.

Panther Dining - Chick-fil-A

Atlanta, GA

Student Software Assistant

Sep 2022 – Oct 2024

- Built React-based inventory management UI with Node.js backend on AWS, following internal coding standards and participating in weekly code reviews with senior developers.
- Integrated OpenAI LLMs for predictive analytics, implementing secure API endpoints following OWASP guidelines and PCI compliance standards, improving forecasting accuracy by 25%.
- Collaborated with cross-functional teams using Agile methodology, contributing to sprint retrospectives and implementing CI/CD automation that reduced deployment time by 40%.
- Developed chatbot interface using React components and GPT-4 integration, working closely with UX team and incorporating user feedback through iterative development cycles.

EDUCATION

Georgia State University

Atlanta, GA

Bachelor of Science in Computer Science

Expected 2025

- President's List, Spring 2024 — GPA: 3.52
- Relevant Coursework: Software Engineering, Web Development, Database Systems, AI/ML

PROJECTS

Secure Financial Management Platform (FinanceTracker) | React, Next.js, Node.js, TypeScript, OAuth 2.0

[Live Demo](#)

- Developed full-stack fintech application using React/Next.js frontend and Node.js backend, implementing secure payment flows similar to PayPal's architecture with OAuth 2.0 and encryption.
- Integrated AI-powered financial insights using OpenAI API with custom prompt engineering, following established code review processes and maintaining 99.9% uptime through comprehensive testing.
- Implemented CI/CD pipeline with GitHub Actions, automated testing suite, and collaborated with team members through pull requests and code reviews following Git best practices.

TinyTasks - AI-Powered Task Management Mobile App | React Native, Expo, Node.js, Flask, Groq AI

[GitHub](#)

- Developed full-stack React Native mobile application with voice/text AI input using Groq's Whisper and Llama models, implementing natural language processing for intelligent task extraction and subtask generation.
- Built Flask backend for AI processing integrated with React Native frontend using Expo Router, following SDLC best practices with feature branching strategy and comprehensive code review process.
- Implemented real-time synchronization between Supabase database and device calendar, utilizing optimistic UI updates and asynchronous processing for seamless user experience across iOS and Android platforms.

TECHNICAL SKILLS

UI Development: React, Next.js, TypeScript, JavaScript, HTML/CSS, Tailwind CSS, Responsive Design

Backend: Node.js, Python, FastAPI, Express.js, RESTful APIs, Microservices

LLM/AI Integration: OpenAI GPT-4, Anthropic Claude, AI Dev Tools (Claude Code, Cursor, Windsurf), Google Agent Development Kit (ADK), Prompt Engineering, RAG Systems

DevOps & SDLC: Git/GitHub, CI/CD Pipelines, Docker, Kubernetes, Agile/Scrum, Code Reviews, Testing Frameworks

Databases: PostgreSQL, MySQL, MongoDB, Redis, Query Optimization

Cloud & Security: AWS (EC2, S3, Lambda), OAuth 2.0, JWT, Payment Gateway Integration, PCI Compliance