MANORATH

Pune, India

📞 +91-9352229006   ✉ chughmanorath@gmail.com   💼 LinkedIn   ⚙ GitHub

Portfolio   LeetCode   GeeksforGeeks

EDUCATION

Indian Institute of Information Technology (IIIT), Pune **2023 − 2027**
B.Tech in Computer Science and Engineering – **CGPA: 8.00** *Pune, India*

TECHNICAL SKILLS

Languages: C, C++, JavaScript, TypeScript, Python
Frontend: React.js, Next.js, HTML, CSS
Backend: Node.js, Express.js, FastAPI, RESTful APIs
Databases: PostgreSQL, MySQL, MongoDB
AI/ML: LangChain, LangGraph, RAG, Gemini AI, Vector Embeddings
Tools: Docker, Git, Prisma, WebSockets
Competitive Programming: 500+ problems solved on LeetCode, GeeksforGeeks, CodeChef

PROJECTS

Agentic AI Sales Assistant ⧉ | Next.js, LangGraph, Neo4j, Gemini

- Architected multi-agent conversational AI using LangGraph and Gemini for product queries, cart management, and recommendations across 10,000+ products.
- Implemented hybrid search with keyword matching and vector embeddings using Reciprocal Rank Fusion, achieving 87% accuracy and 1.8s response time.
- Integrated Neo4j Graph Database with native vector search for context-aware semantic matching, improving user engagement by 25%.
- Built stateful agent workflows with 8+ tools including loyalty management and dynamic cart operations.

Real-Time Quiz Platform with AI ⧉ | React, Node.js, Prisma, Redis, WebSockets

- Built full-stack role-based quiz platform enabling teachers to conduct live quizzes and students to participate using session codes.
- Implemented real-time updates with WebSockets and Redis for instant question delivery, live counts, and leaderboards.
- Developed scalable backend with Express.js, Prisma, PostgreSQL, JWT authentication, and Dockerized deployment.
- Integrated Gemini via LangChain to auto-generate quiz questions from topics/notes, enhancing teacher productivity.
- Created analytics dashboards with per-question statistics and real-time session metrics using Redis and PostgreSQL.

DocuQuery AI − Intelligent Document Assistant ⧉ | FastAPI, LangChain, Gemini AI

- Engineered Retrieval-Augmented Generation (RAG) system enabling conversational Q&A over uploaded PDFs and web content with 92% answer accuracy.
- Built semantic search pipelines using LangChain and Gemini AI with Qdrant vector database, reducing query response time to under 2 seconds.
- Integrated automated document parsing using PyMuPDF and text chunking strategies to optimize context retrieval for large documents (100+ pages).
- Developed production-ready FastAPI backend with interactive Streamlit UI featuring document upload, query history, and source citation visualization.

RELEVANT COURSEWORK

- Data Structures & Algorithms
- Operating Systems
- Object-Oriented Programming
- Computer Networks
- Software Engineering
- Database Management