VIKAS MOURYA

Aspiring Software Engineer | Backend Development | Python, Django
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Portfolio: vickypedia.tech
GitHub: github.com/vickypedia-12
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Leetcode: leetcode.com/u/vickypedia$_1$2

Education

University of Mumbai   **2022 - Present**
Bachelor of Engineering in Information Technology | 9.73 CGPA   *Mumbai, Maharastra*

Skills

Languages: Python, C++, C, Javascript.

Tools and Deployment: AWS, Vercel, Render, streamlit.

Databases: PostgreSQL, Mysql, NeonDB, Chroma (Vector DB).

Frameworks: Django, Flask, FastApi, NextJs.

Development: REST APIs, Version Control, Agile

Coursework: Operating System, Database Management System, Computer Networks, Machine Learning,

Projects

StudyRAG | *Python, FastAPI, Lang Chain, Streamlit* | *Github*   **March 2025**

- Designed a Retrieval-Augmented Generation (RAG) system enabling students to upload study materials (PDF, PPT, JSON) and query them for context-aware, source-backed answers, reducing manual note searching by 80%.
- Integrated FastAPI backend with Chroma vector DB for semantic search and a Streamlit frontend for document upload, search, chat, and file management, enabling fast document search and AI-powered Q&A for students.
- Executed document parsing (multi-format loaders, chunking, embeddings via Google Generative AI) and integrated Gemini 1.5 Pro for accurate, reference-driven responses.
- Improved study efficiency for 50+ active users by streamlining Q&A and document retrieval, decreasing research and note review time by up to 60%.

Morpheus | *Python, Django, DRF* | *GitHub*   **January 2025**

- Developed a full-featured Google Forms-like web application using Django and DRF, enabling admins to create, edit, and manage forms with up to 100 questions, supporting multiple question types and drag-and-drop ordering.
- Orchestrated real-time analytics modules, allowing 500+ user responses per form and generating insights (top words, dropdown trends, checkbox combinations) directly from the database.
- Implemented REST APIs with token-based authentication, QR code generation for easy form sharing, and Swagger/Redoc documentation for seamless integration with other services.
- Automated form creation and analysis efficiency reducing manual analytics work by 70% for early testers.

Experience

Vighnotech   **July 2024 – January 2025**
AI Backend Intern   *Mumbai, Maharashtra*

- Worked with development and product teams to implement AI in IMS, CRM, and mobile applications.
- Engineered custom RAG-based applications from scratch using Scrapy and FastAPI, storing data in a vector database for optimized retrieval.
- Built a MultiAgent system for chatbot applications, integrating multiple functionalities into a single solution.
- Optimized backend architecture and data pipelines, improving system response time by 30%.

Jurisphere   **March 2024 – April 2024**
Software Engineer Intern   *Mumbai, Maharashtra*

- Enhanced RAG-augmented AI capabilities by refining data curation and processing pipelines.
- Utilized Scrapy and other Python frameworks to scrape dynamic and static websites efficiently.
- Automated daily report generation, enhancing team productivity and data insights.
- Contributed to AI-driven workflow enhancements while working in a fast-paced startup environment.

Achievements

* 1st Prize in National Level Hackathon at IIT JODHPUR.
* Solved 400+ DSA problems across LeetCode, CodeChef (2), HackerRank (5), and GFG.
* Participated in 5+ hackathons, including National level events.
* Volunteered and participated in 10+ technical sessions and events.