RHUSHYA KC

GitHub | LinkedIn | Rhushya

Location: Bengaluru
Email: rhushya2004@gmail| Mobile: +91 7019292150

TECHNICAL SKILLS

- **AI|ML|DL:** PyTorch, Transformers, Genrative Ai , ai agents , MCP, finetuning , RL
- **Python Libraries:** FastAPI, Flask, Pandas, numpy , Poetry, Langchain, LlamaIndex, Rest
- **Web Frameworks:** React.js, Next.js, Express, Node.js, Tailwind, shadcn
- **Cloud:** Docker, Kubernetes, Google Cloud , AWS
- **Databases:** MongoDB, MySQL, Supabase , FAISS, Qdrant, ChromaDb
- **Languages:** HTML, CSS, JavaScript, Python, C/C++, SQL, JAVA
- **Open Source Contribution**
- **Communication**
- **Leadership**

EXPERIENCE

Radisys   **Bengaluru**
Intern
- Gained in-depth knowledge of 4G and 5G network architectures and their operational frameworks.
- Worked hands-on with network protocols, including TCP and UDP, enhancing understanding of data transmission.
- Explored and implemented core concepts in network protocol design and deployment.

Signalz   **Bengaluru**
Intern
- Contributed to full stack development, enhancing both frontend and backend functionalities.
- Improved UI rendering for a smoother and more responsive user experience.
- Developed and shipped reusable internal components as APIs and npm packages.
- Enhanced authentication mechanisms, increasing security and user trust.
- Streamlined user interactions to make the platform more intuitive and convenient.

Achievement

Residency
- Had been selected to the residency program , I've have been experimenting with applications for an OS-level AI agent system (like GitHub Copilot for operating systems but way better), startup/residency cohorts (selected among ~600 people globally)

PROJECTS

Foodiespot_Agent   **Python, Pydantic , Groq API, Llama-3/Llama-3.1-8B, uuid**
- Designed and implemented a conversational AI agent for restaurant reservations **using custom tool-calling logic without external frameworks (e.g., LangChain).**
- Developed a purpose-built workflow where the LLM (Llama-3 via Groq API) interprets user queries and, when required, outputs structured JSON tool calls.
- Enabled **direct invocation of backend Python functions for tasks such as restaurant search, availability checks, and reservation booking**, operating on in-memory data models.
- Built all tool schemas, argument validation, and execution mapping from scratch, allowing precise control over agent behavior and easy extensibility for business-specific requirements.

Automation   **Google Apps Script, JavaScript, Gmail API, Google Drive API**
- Automates email-based invoice workflows using Google Apps Script and JavaScript, integrating directly with Gmail and Google Drive APIs.
- Extracts and organizes key business data from invoice attachments (PDFs, images) with zero manual data entry.
- Provides a serverless, extensible solution ideal for small businesses and accounting teams to streamline bookkeeping and reduce errors.

Citizen Database Management System   **Python, MYsql,pymysql,streamlit**
- Designed and implemented a comprehensive Citizen Database Management System that streamlined government record-keeping processes and improved data retrieval efficiency by 40%.
- Developed secure user authentication and role-based access control, ensuring sensitive citizen data remained protected while allowing appropriate administrative access levels.
- Engineered robust search functionality with advanced filtering capabilities, enabling government officials to quickly locate and update citizen records across multiple criteria.
- Created an intuitive dashboard interface that visualized demographic data trends and provided real-time statistics to support data-driven policy decisions and resource

Kloudmate   **Python, Ollama,langchain,pstuil**

- Kloudmate is a Python-based observability assistant with a Streamlit web interface, enabling users to query system telemetry (CPU, memory, disk) using natural language for SQL.
- It efficiently stores metrics in a DuckDB database and uses Retrieval-Augmented Generation (RAG) powered by a local Llama2 model via Ollama for insightful, real-time analysis.
- Supports concurrent access, allowing seamless monitoring and natural language summaries for system data.

Legal ai   **Python, ,langchain,ChromaDB,groq beautiful soup , google colab**

- Automated Legal Data Scraping & Storage: Developed a robust pipeline to scrape diverse legal documents and case data from multiple online sources, ensuring comprehensive and structured data collection.
- Efficient Data Management with Chroma: Leveraged Chroma as a vector database to store, index, and efficiently retrieve high-dimensional legal data, enabling scalable search and semantic similarity operations.
- Intelligent Question Answering with GROQ: Integrated advanced GROQ-based natural language processing to allow users to query the legal database and receive accurate, context-aware answers in real time.

Finalit   **Sarvam api , groq, pydub , streamlit**

- Multilingual and multimodal and , voice & text AI assistant for loan eligibility, application guidance, and financial tips.
- Uses Sarvam AI exclusively for translation, transliteration, speech-to-text, and text-to-speech, ensuring responses match user language and script.
- Easy Streamlit setup, local JSON storage for privacy, supports 10 Indian languages and 30-second audio processing.

Emostream   **Kafka, spark, python**

- Built a real-time emotion tracking system using Apache Kafka and Spark with 2-second processing windows.
- Developed a Flask-based web application with WebSocket integration for real-time emoji visualization.
- Designed a scalable data pipeline with smart aggregation, optimizing high-volume emoji streams.
- Implemented a microservices architecture with Kafka producer-consumer and multithreading for scalability.

Learning

- Mainly my learning is Through YouTube , X, LinkedIn , Blog , completely self taught , mainly learnt through observation

Publications

Automated BCS Classification using Machine learning : An Explainable AI Approach for BCS Classification System

- The main purpose of this automation of BCS Classification for pharmaceutical, as BCS classification is a intense process , we make it ease by developing ML model ,with rules to predict the BCS class with just log p and log s values and smiles data , this would give an edge and pharmacy and medical research about the solubility and permeability with more accuracy and precision

Activity

- Debsoc (Debate Club) -Member
- Teacher Assistant -Machine Learning
- Teacher Assistant -DBMS

- EDUCATION

Degree/Course	University / Board	Year	GPA/PRECENTAGE
B.Tech (COMPUTER SCIENCE AND ENGINERRING)	University(PES,Banglore)	(2022-present)	8.52(CGPA)
Higher Secondary (PCMC)	State(Kumarans, Bangalore)	2020-2022	88% (92%PCM)
School	ICSE(Baldwin, Banglore)	2008-2020	94 %

Languages

- English
- Hindi
- Kannada

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