# **AKASHSG**

## **Software Development**

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Mysore, Karnataka, India

#### **SUMMARY**

Results-driven Software Developer with strong proficiency in Python and handson experience in Artificial Intelligence, Machine Learning, and Natural Language Processing. Proven ability to build scalable applications, intelligent systems, and intuitive interfaces. Adept in prompt engineering, LLM integration, and vector database implementation to solve real-world problems.

### **SKILLS**

**Programming:** Python, C, C++, SQL, HTML, CSS, Flask, Git, REST API,N8N **Libraries/Frameworks:** LangChain, TensorFlow, PyTorch, Hugging Face, Streamlit **Concepts:** NLP, RAG, Few-Shot Learning, Embeddings, RLHF, Prompt Engineering **Databases:** AWS, Docker, SQL Server, FAISS, Chroma, Vector Databases

#### **EXPERIENCE**

#### Al Software Developer – Apollo Pharmacy / Apollo 247 Jul 2024 – Present

- Increased reporting efficiency by 70% through a custom-built multiserver SQL query tool, surpassing SSMS limitations.
- Reduced monthly sales data consolidation time by 80% by automating data extraction across 50+ branches.
- Enhanced non-technical user access by developing a natural language querying interface for pharmacy data using Streamlit and LangChain.
- Boosted query generation accuracy by 60% through integration of Gemini-1.5-pro with few-shot learning.
- Improved semantic search relevance by 40% using HuggingFace embeddings and Chroma vector store.

## PromptEngineer-Turing (Remote) Oct 2024 - Dec 2024

- Enhanced model response quality by refining over 150 prompts using RLHF and collaborative model evaluation.
- Accelerated Al iteration cycles by 25% through structured documentation and feedback loops with ML teams.

#### Al Intern – Infosys (Remote) May 2024 – Jul 2024

- Achieved 92% accuracy in predicting obesity risk with a machine learning classification model trained on real-world health data.
- Deployed an interactive Streamlit app that enabled real-time risk assessment for over 500 users
- Optimized healthcare interventions by identifying top five predictive factors through EDA and feature engineering.

#### **CERTIFICATIONS**

- Artificial Intelligence Primer-Infosys
- Prompt Engineering for Everyone IBM Cognitive Class

#### **PROJECTS**

#### **CHAT WITH DATABASE**

PYTHON, LANGCHAIN, RAG, VECTORDATABASE - 2025

- Built an Al-powered interface using LangChain and Streamlit to allow users to query structured databases using natural language.
- Achieved 55% improvement in data retrieval efficiency through Retrieval-Augmented Generation (RAG) and semantic search.
- Integrated HuggingFace embeddings with Chroma and FAISS for millisecond-level vector search accuracy.
- Applied few-shot learning with prompt tuning to increase query translation accuracy by over 60%.
- Enabled SQL query transparency by dynamically displaying both generated queries and results in a clean UI.
- Boosted accessibility for non-technical users, supporting real-time querying across multiple database tables securely via SQLAlchemy.

# AI Assistant & PDF Chatbot with Gemma3B

PYTHON, LLM, NLP, Vector Databases - 2025

- Developed an intelligent chatbot using Gemma 3B and Streamlit to answer questions from PDF documents in real-time.
- Implemented document parsing and semantic search using FAISS and HuggingFace embeddings for highly accurate responses.
- Enabled conversational interaction with multi-page PDFs, supporting over 95% user query resolution.
- Reduced document query time by 70% through optimized embedding and indexing techniques.
- Integrated dynamic UI components in Streamlit, enabling interactive PDF selection and highlighted answers.
- Improved user experience for 200+ users by enabling multilingual support and secure file handling.

#### **EDUCATION**

Bachelor of Engineering in Information Science The National Institute of Engineering, Mysore Sept 2020 – May 2024 CGPA: 7.5 / 10.0

#### LINKS

- Portfolio
- LinkedIn
- GitHub
- LeetCode
- CodeChief

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