AKSHAY KUMAR C P

AI Engineer

+91 8123920743
akshaykumarcp01@gmail.com
India, Karnataka, Bangalore
LinkedIn | Portfolio | GitHub

CERTIFICATES

- Oracle Gen AI Professional
- igmGuru Gen AI
- Microsoft: AI 102 & AI 900
- AWS: ML Specialty, Cloud Practitioner
- Dataiku Core Designer Certificate
- Dataiku ML Practitioner Certificate

TECHNICAL SKILLS

Dev	Python, Pytorch, Langchain, Langraph, Pyspark, etc.
Vector DB	Azure AI Search, Databricks Vector Search, Chroma, FAISS
Fine tune	Unsloth, Dreambooth
API	Fast API, Django, Flask
UI	Streamlit, Chainlit
Cloud	Azure & Databricks
DB	Azure SQL server, MongoDB,
Agile	Scrum
Devops	Azure DevOps

KEY INDUSTRIES

- Legal. Marketing.
- Finance
- Open-Source Software

EDUCATION

M.C.A from B.M.S Engineering college (Autonomous V.T.U), Basavanagudi, Bangalore.

PROFILE

- AI Engineer with 6.1 years of experience in designing, developing and deploying cutting-edge Generative AI, Agentic AI, and RAG & Multimodal-RAG based solutions across enterprise environments.
- Led cross-functional teams to deliver multimodal AI systems, secure agentic workflows, and CI/CD-enabled deployments using Azure, Langchain, Langraph, and Databricks.
- Proficient in building scalable AI applications, integrating LLMs and Azure services for use cases like Chatbots, NL2SQL, legal review, synthetic data generation, etc.
- Innovator in AI automation, with hands-on expertise in orchestration, prompt engineering, vector databases, and natural language interfaces for SQL and code generation.

WORK EXPERIENCE

Senior Consultant - Generative AI Developer

Capgemini Technology | May 2022 - Present

- Developed multiple Agentic AI, RAG and Multimodal-RAG systems using Langchain, LangGraph, Databricks and Azure OpenAI.
- Led a cross functional teams to build and deploy various Generative AI solutions.
- Optimize solutions using Python/Pyspark best practices.
- Created AI-enhanced vector databases with document enrichment for enterprise chatbot search.
- Analyzed RFPs and translated requirements into scalable GenAI solutions.

Software Development Engineer – ML Engineer

Flexera Software's | Jun 2019 – May 2022

- Automated open-source software analysis workflows using Python and NLP.
- Developed machine learning models to detect open-source licenses and extract copyright information.
- Built REST APIs to expose model predictions, improving component license mapping from 35% to 55%.
- Researched and implemented chatbot platforms for HR automation using Dialogflow, Rasa X, and Azure LUIS.

PROJECTS

A. Multimodal-RAG Playground

- Support multimodal file formats such as Image, Video, Audio, Images in PDFs.
- Configure Azure Devops to CI/CD for performing releases for every sprint.
- Led team of UI, API, Data engineering and Generative AI for successful delivering features.
- Technologies: Langchain, Microsoft Azure, Databricks & Generative AI.

B. Agentic AI Chatbot

- Design & build Agentic AI workflow having text and visualization modes.
- Incorporated ReAct Agentic pattern from scratch and function calling for building reliable and robust Agentic System. Handled 5 team members.
- Deployed solution in an Azure App Service for accessing Chatbot within organization.
- Technologies: Langraph, FastAPI, Azure services – OpenAI (GPT-4o Model), App service, Key Vault, Storage, MySQL Server DB.

C. RAG Playground

- Contributed document parsers and AI enrichments for building an enriched vector database for downstream chatbot.
- Technologies: Langchain, Microsoft Azure, Databricks & Generative AI.

D. Code Assistant

- Generate Pyspark code for Business documents.
- Technologies: Databricks GPU Compute, HuggingFace, Open-Source tools, Prompt Engineering, etc.

E. RAISE platform – Agentic AI

- Agent based Human-in-loop for monitoring and evaluation.
- Security on Generative AI solutions in terms of Prompt injection attacks.
- Data quality metrics for Gen-AI solutions.
- Technologies: Microsoft Autogen & LLM.

F. Legal Tender AI Review

- Utilized RAG based architecture and various prompt techniques for performing Legal tender document reviews.
- Requirement gathering, defining technical approach, performing multiple experiments under development of the solution.
- Technologies: GPT-3.5-Turbo LLM, text-embedding-ada-002 embedding model, Azure Cognitive Search vector store, Langchain & Prompt engineering.

G. Generate Synthetic Data

- Tabular: Utilized CT-GAN for synthetic tabular data generation.
- Image: Image synthesis using Open-Source Stable Diffusion Models.

H. Personalized Marketing

- Personalize images using Open-Source Stable Diffusion Models. Fine Tune: Dreambooth.

I. Natural Language to SQL Query

- Implemented using OpenAI “txt-davinci-003” model and Prompt engineering techniques.
- Build UI using Streamlit/Gradio framework for show casing quick demo.

J. Customer Satisfaction Analytics

- Sentiment classification and Topic Modelling.

K. Open-Source License Detection & Copyright Extraction

- Increased license mappings from 35% to 55%.
- Product was benefitted by identifying the precise copyright holder from license text.
- Data preprocessing, modelling, expose model prediction using REST API & deployment.
- Technologies: Python, NLP, Spacy, ML, REST APIs, UWSGI Server & MongoDB.

L. Q&A Chatbot for HR

- Research & implementation of multiple chatbot platforms such as google Dialog flow, Amazon Lex, Microsoft Azure Luis, Rasa X, using Python & MongoDB.
- Chatbot answered FAQ on HR department and sent out the information to mail.