

Sankalp Singh

— 9691434226 — sankalpsingh2595@gmail.com — Sankalp Singh — sankalp250

Summary — AI/ML Engineer skilled in building production-grade ML pipelines, scalable GenAI systems, and LLM-powered automation. Experienced in supervised/unsupervised learning, NLP, transformers, RAG, and end-to-end model deployment. Strong foundation in software engineering, enabling the design of efficient, data-driven solutions and high-impact real-world AI applications across ML, GenAI, and MLOps workflows.

Skills

Languages Python, SQL, C, Html

Web Frameworks/APIs FastAPI, Streamlit, Langchain, Langgraph

ML Frameworks Scikit-learn, PyTorch, Hugging Face, Keras

Databases MySQL, PostgreSQL, Sqllite

Data Visualization Pandas, NumPy, Seaborn, Tableau, Excel

DevOps Tools Docker, Git, GitHub, AWS

Experience

Prodigy Infotech

Jul 2024 – Aug 2024

Machine Learning Intern

Remote

- Developed and optimized machine learning models for regression, classification, and clustering using Python and Scikit-learn, improving accuracy by 15% through feature engineering and hyperparameter tuning.
- Engineered features from raw datasets to enhance model performance and deployed predictive models to address real business problems.
- Implemented NLP techniques for text classification, achieving 92% accuracy on a dataset of 10,000+ entries and presenting insights to stakeholders.

Education

Education

B.Tech in Computer Science and Engineering

2022 – 2026 (Expected)

UEM Jaipur, Jaipur, India

CGPA: 8.0 (6th Semester)

Class XII (CBSE)

2021

Arcadia Academy, Kota, India

Percentage: 73.5%

Class X (ICSE)

2019

M.C. Kejriwal Vidyapeeth, Kolkata, India

Percentage: 80%

Projects

agentic-qa-app

GitHub

- Engineered a production-grade Retrieval-Augmented Generation (RAG) system using LangGraph and LangChain.
- Implemented a 4-stage autonomous workflow (Forage → Summarize → Critique → Assimilate) enabling fully agentic knowledge processing.
- Built and maintained a vector knowledge base with FAISS and ChromaDB, reducing manual knowledge curation time by 100%.

Prompt-Enhancer-app

GitHub

- Architected a production-ready prompt enhancement platform using LangGraph state machines and a dual-LLM strategy (Groq primary with Gemini fallback).
- Implemented ML-powered quality prediction using scikit-learn to auto-detect low-quality responses (i0.60 threshold) and retry up to 3 times.
- Achieved 40–60% API cost reduction through PostgreSQL-backed caching and reduced enhancement failures by 85%.

StudyBuddy

GitHub

- Architected and deployed a production-ready AI learning ecosystem using FastAPI, PostgreSQL, and Streamlit with Dockerized deployment on Render.
- Built a multi-agent LangGraph architecture with specialized agents (Interview, Daily Digest, LeetCode, Flashcard, Resume) powered by Groq LLM and Tavily web search.
- Implemented 100% JWT-secured authentication and delivered 1000+ personalized interview questions through RESTful APIs.

Leadership

- Organizer, AceHack 3.0 4.0: Coordinated logistics, managed 10+ mentors, and supported 500+ participants ensuring smooth execution and fostering a strong developer community.