

# Praroop Anand

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LinkedIn: LinkedIn GitHub: GitHub Portfolio: praroop.site

## SUMMARY

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AI Engineer with hands-on experience building and deploying end-to-end ML and LLM-powered systems, including RAG pipelines, agentic AI workflows, and multi-agent orchestration. Proficient in LangChain, LangGraph, and modern GenAI architectures, with strong expertise in designing scalable pipelines from data processing to real-time inference. Experienced in deploying production-grade applications using FastAPI and Docker, with a focus on performance and low-latency systems. Skilled in Python, PyTorch, scikit-learn, and SQL, with practical experience in MLOps and workflow automation using n8n.

## EDUCATION

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### Institute of Engineering and Management

*B.Tech, Information Technology*

Kolkata, India

Aug 2023 – Present

### Chinmaya Vidyalaya

*Class XII: 80%*

Bokaro, India

2023 / 2021

## TECHNICAL SKILLS

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**Languages & DB:** Python, C++, TypeScript, SQL, PostgreSQL

**ML / DL:** PyTorch, TensorFlow, Scikit-learn, Transformers, XGBoost, ANN, CNN, BERT

**GenAI / LLMs:** LangChain, LangGraph, RAG, OpenAI API, Groq API, Hugging Face, FAISS, ChromaDB, Sentence-Transformers, Prompt Engineering, Fine-tuning

**Data & Tools:** Pandas, NumPy, NLTK, Matplotlib, Seaborn, MLflow, Git, Jupyter Notebook, Google Colab

**Deployment & Automation:** FastAPI, REST APIs, Streamlit, Docker, n8n, Webhooks

**Soft Skills:** System Design Thinking, Technical Communication, Team Collaboration

## PROJECTS

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### YouTube RAG Chatbot | *LangChain, FAISS, FastAPI, Streamlit*

2024

- Built a RAG system over 500+ YouTube transcripts using semantic chunking and FAISS vector retrieval, achieving sub-200ms query response time.
- Reduced LLM hallucinations by ~60% via grounded retrieval; deployed via FastAPI and Streamlit serving 50+ real-time user sessions.

### LLM Resume–Job Matching System | *RAG, Embeddings, Transformers, FastAPI*

2024

- Built an LLM-powered system achieving 85%+ match accuracy across 100+ resume-JD pairs using semantic similarity and embedding-based retrieval.
- Optimized FastAPI inference pipeline to handle 200+ requests/hour with under 300ms latency across diverse resume formats.

### Automated Job Search Workflow Engine | *n8n, LLM APIs, Webhooks*

2025

- Designed 5+ modular n8n workflows automating job search, filtering, and ranking using LLM APIs and event-driven webhook triggers.
- Reduced manual job discovery effort by ~80%, cutting average search time from 2 hours to under 20 minutes per day.

### Customer Churn Prediction | *Scikit-learn, Pandas, XGBoost, EDA*

2025

- Built an end-to-end churn prediction framework on 10,000+ records; benchmarked 4 models, achieving AUC-ROC of 0.91 with XGBoost.
- Surfaced top 5 churn drivers via EDA and SHAP analysis; retention insights projected to reduce churn rate by 15–20%.

### House Price Prediction System | *TensorFlow, FastAPI, Streamlit*

2025

- Built an end-to-end deep learning pipeline across 1,000+ property records, attaining  $R^2$  of 0.88 and MAE within 3.5% of actual price.
- Deployed live on Render via FastAPI and Streamlit; reduced manual price estimation time by ~90% for end users.

## EXPERIENCE

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### HackOasis Hackathon

Kolkata, India

*Event Coordinator*

2025

- Managed a large-scale hackathon with 800+ participants across 100+ teams, coordinating PR, logistics, and video production end-to-end.
- Led a 10-member ops team in a high-pressure 24-hour environment, ensuring 100% on-schedule execution across all 6 event phases.

## CERTIFICATIONS AND TRAINING

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- **Google** – Generative AI Fundamentals (Google Cloud Skills Boost)
- **DeepLearning.AI** – LangChain for LLM Application Development (Coursera)
- **DeepLearning.AI** – Building Agentic RAG with LlamaIndex (Coursera)
- **Databricks** – Generative AI Fundamentals
- **Completed** – 100 Days of ML, 100 Days of DL