Bhavishya Pandit

Pangalore, India
Image: Bangalore Bangalore, India
Image: Bangalore Bangalore

Experience _

IBM, Senior AI Engineer

- Conducted multi-step, multi-class classification of user complaints, **enhancing model accuracy from 75% to 91.2%** through strategic oversampling via LLaMA 3.1 70B.
- Collaborated with a cross-functional team to architect an Agentic RAG pipeline, retrieving and generating answers from 6M+ IBM documents stored in S3 buckets.
- Worked closely with ML engineers to fine-tune retrieval heuristics and prompt engineering for Watsonx product queries, optimizing accuracy from 60% to 90%.
- Leveraged the existing vector database and conducted iterative experimentation, contributing to **\$10M+ in annual savings** for IBM's product team.
- Led the development of an agentic tool that generates high-level system architectures using multi-agent orchestration. Currently **used by 300+ AI Engineers**.

Rakuten, Data Scientist

- Optimized ad spend with Meta Learners for uplift modeling and revenue prediction, using Shapley for feature importance. Built a Data Studio dashboard, cutting costs by 27% and boosting revenue by 14.3%
- Teamed up to build a time-series forecasting pipeline for 3,000+ e-commerce keywords using Prophet, ARIMA, and LSTM. Improved trend capture using seasonality detection, peak analysis, and cosine similarity, reducing MAPE from 15% to 3%.
- Led end-to-end deployment of the forecasting model, **driving INR 12M revenue** through accurate prediction of search string impressions.
- Orchestrated and engineered the security module for LLM-powered products, implementing real-time threat detection, prompt injection defences, and anomaly monitoring, ensuring robust model integrity and compliance.

Bangalore, India Nov 2023 – Present

Bangalore, India Jul 2021 - Nov 2023

Technical Skills

Generative AI: LLMs (GPTs, Deepseek, Gemini, Llama), RAG, Agents, Finetuning LLMs, LoRA, QLoRA, PEFT, CLIP **Programming Languages and Data Science:** Python, SQL, ML, CNN, RNN, Transformers, Computer Vision, NLP **Databases and Storage:** PostgreSQL, MySQL, Vector DBs (Milvus, Chroma, FAISS), AWS S3, BigQuery, Elasticsearch **Libraries and Frameworks:** PyTorch, TensorFlow, Hugging Face, LangChain, CrewAI, Numpy, Pandas, Sklearn **Cloud and Deployment:** GCP (Vertex AI, Data Studio), Docker, Git, CI/CD, FastAPI, Streamlit, Docker

Education

Masters in Machine Learning, University of Arizona **Bachelor of Engineering - Computer Science Hons.**, Chandigarh University

2023 - 2025

2017 - 2021

Co-curricular Achievements _____

- 2x Hackathon Winner for Gen Al Security and Content Generation (won INR 5 Lacs).
- Mentored hackathon teams on LLMs, RAG, and model optimization, guiding them to 1st and 2nd place wins, securing INR 6 Lacs across multiple competitions.
- AI Advisor to Govt of Uttarakhand & YC startups and Speaker at Ministry of Home Affairs, IITs and NITs.