### Koushik Pusapelli

Hyderabad, India • +91 7680060331 • <u>pusapellikoushik@gmail.com</u> <u>LinkedIn • GitHub</u>

#### **Professional Summary**

AI/ML Engineer with hands-on experience in training and fine-tuning LLMs using RLHF, prompt engineering, and building scalable conversational AI systems. Developed multi-agent chatbot solutions using LangChain, Hugging Face, and Google Cloud Vision API. Proficient in Python scripting, automation workflows, and data analysis using SQL and Power BI. Passionate about creating intelligent, user-centric AI products.

#### Skills

- AI & Conversational Systems: LLMs (RLHF, Prompt Engineering), Hugging Face, LangChain (LangGraph), Agentic AI, Retrieval-Augmented Generation (RAG), Chatbots, Judge Models
- Python for ML & Automation: Pandas, NumPy, PyTorch, TensorFlow, Matplotlib, Jupyter, Streamlit, Google Cloud APIs
- Testing & Evaluation: Automated test scripts, Conversational flow simulation, Prompt validation
- Data Analysis & BI: SQL (MySQL, MS SQL), Power BI (DAX, Power Query), Python-based data wrangling and visualization

### **Work Experience**

### Al Product Contributor – Business Analyst

Turing Enterprises Inc | Sept 2024 - February 2025

- Trained and fine-tuned LLMs using RLHF to improve conversation quality and multimodal comprehension.
- Annotated response datasets, performed response ranking, and crafted improved prompts for LLM evaluation.
- Designed datasets for judge models simulating user queries and ranking LLM outputs for acceptability.
- Developed Python scripts to monitor logs and transform user input data for model inference.
- Built and evaluated RAG pipelines involving text, tables, and documents.

# **Data Analyst Intern**

KulturHire | July 2024 - August 2024

- Analyzed survey data from over 3000 Gen Z individuals to uncover trends in career preferences.
- Cleaned and visualized data using Excel and Power BI; used SQL for querying and filtering key segments.
- Documented findings using the 5W1H framework and earned a 100% rating for quality.

### **Projects**

#### Conversational AI - Multi-Agent Real Estate Chatbot

GitHub | Demo | March 2025

- Built a multi-agent chatbot using LangChain's LangGraph and Hugging Face models.
- Integrated Google Cloud Vision for property issue detection and Gemini-1.5-flash for natural language processing
- Created edge case prompts and simulated end-to-end user flows to evaluate chatbot reliability.

## Education

# Bachelor of Technology, Mechanical Engineering

Indian Institute of Information Technology, Design and Manufacturing, Jabalpur Expected July 2024