

Raju Gopi

☎ +91 9353973699 ✉ rajugraj29@gmail.com 🔗 www.linkedin.com/in/raju-gopi-contact

SUMMARY

GenAI Developer | 2+ Years of Experience

A results-driven GenAI developer with 2+ years of experience specializing in LangChain, OpenAI, and Gemini. Proficient in building solutions for Retrieval Augmented Search (RAG), code modernization, unit testing automation, and video content refinement. Experienced with VectorDB integration, and skilled in using models like Llama-7b. Strong foundation in machine learning and deep learning, with a focus on delivering scalable, high-performance solutions. Proven track record in driving successful outcomes through effective problem-solving and collaboration.

EDUCATION

RNS Institute of Technology
Bachelor of Engineering – 8.1 CGPA

08/2018- 07/2022
Bengaluru, India

TECHNICAL SKILLS

Programming Languages: Python (Primary), Java

Generative AI & LLMs: OpenAI, Google Gemini Pro, Llama2, Hugging Face Transformers

AI/ML Technologies: Fine-tuning with custom data, Vector Embedding, NLP, QLoRA (Quantized Low-Rank Adapters), LoRA (Low-Rank Adaptation), RAG (Retrieval-Augmented Generation)

Frameworks & Tools: LangChain, PyTorch, TensorFlow, Streamlit, Django

Deployment & Platforms: Hugging Face Spaces, MySQL, ChromaDB

Visualization & Documentation: PowerBI, Mermaid.js, Markdown, Microsoft Office

Data Science & Miscellaneous: Pandas, NumPy, Scikit-learn, Traditional ML Algorithms

Frontend Development: HTML, CSS, Bootstrap

EXPERIENCE

Infosys (Client-Rich Foods/ Procter and Gamble)

08/2022 – Present
Bengaluru, India

Automated .NET Codebase Documentation and Business Rule Extraction with Google GenAI and LangChain

Developed a POC that uses Google GenAI via LangChain to reverse-engineer .NET (C#) codebases and automatically extract business rules, components, and interactions. The system generates detailed documentation, including component summaries, sequence diagrams, and flowcharts in Mermaid.js syntax. A Streamlit UI facilitates easy input of codebase paths, and HTML reports are generated for easy sharing.

Technologies: Python, Streamlit, LangChain, Google GenAI, Mermaid.js, .NET (C#)

Key Benefit: Automates documentation, enhancing efficiency and accuracy while significantly reducing manual effort.

Product Data Extraction and Categorization from Images Using OCR and OpenAI

Developed a POC to automate product data extraction from images by integrating OCR with OpenAI models. The system uses OCRSpace API for accurate text extraction and then categorizes the extracted product details (e.g., brand, UPC) into a structured JSON format. Leveraging OpenAI through LangChain, the model automates the categorization process, while an image processing pipeline generates "Extreme Black and White" versions of images to enhance clarity. The user-friendly interface, built with Streamlit, allows easy uploads and exports the extracted data as CSV files.

Technologies: Python, Streamlit, OpenAI, LangChain, OCRSpace API, Pandas, PIL, JSON

Key Benefit: Significantly reduces manual data extraction efforts by automating the process of extracting and categorizing product information from images.

Offline LLM-based Task Generation and Project Planning from RFP Summaries Using Fine-Tuned BART Models

Developed an LLM application to automate project task generation from high-level summaries using two fine-tuned BART models—one for summarization and the other for task generation. Both models were customized with Hugging Face Transformers and trained on specific data for high accuracy. The system runs entirely offline, with models stored locally. A real-time task extraction pipeline generates outputs such as summaries, tasks, sub-tasks, complexity levels, and build efforts for RFP documents. Model performance was evaluated using sacrebleu to ensure high-quality output.

Technologies: Python, Hugging Face Transformers, BART, Excel, Google Drive, sacrebleu

Key Benefit: Automates task generation for efficient project planning with full offline capabilities. Future plans include expansion to multiple industries and more detailed task attributes.

ACCOMPLISHMENTS

Insta-Award- Client (Rolls-Royce) Appreciation.