Sri Charan Thoutam

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in linkedin.com/in/CodeWithCharan 🔗 codewithcharan.github.io/My-Portfolio

Education

Ganapathy Engineering College | Sept 2021 - July 2024
B.Tech in Computer Science and Engineering (AI & ML)
- GPA: 7.01/10.0
- **Coursework:** Data Structures, Algorithms, Machine Learning, Deep Learning

Skills

Languages: Python (3 years), SQL (2 years)

Technologies: AWS(EC2, ECR, S3, Lambda), LangChain, LangGraph, MLFlow, Docker, GitHub Actions, CI/CD pipelines, TensorFlow, PyTorch, Scikit-learn, Pandas, NumPy, FastAPI, Flask, Streamlit, Git, DVC

Experience

Data Science Intern | Remote
Innomatics Research Labs ↗ | Sep 2024 – Dec 2024
- Developed and deployed machine learning models for diamond price prediction, achieving 98% accuracy.
- Implemented MLOps workflows with MLFlow and Docker for scalable model deployment.
- Led a 6-member team to develop GenAI-powered Discord bots for text and image generation.
- Authored and published two in-depth Medium articles, "Hacking the System Design" and "Evolution of Language Representation Techniques," covering advanced concepts like search engine architectures, distance metrics, language vectorization techniques, and embeddings.

Projects

Diamond Price Prediction (Internship Project) - GitHub ↗ | Oct 2024 - Oct 2024
- Developed a machine learning model to predict diamond prices based on features like carat, cut, color and clarity. Automated MLOps pipeline with stages for Data Ingestion, Validation, Transformation, Model Training, Evaluation and Prediction. Deployed the app on AWS EC2 for production use.

Awesome LLM Apps (Open-Source Contribution) - GitHub ↗ | Jan 2025 - Present
- Contributing to a collection of awesome LLM apps with AI Agents and RAG using OpenAI, Gemini, Anthropic and other opensource models.

AI Blog Search (Personal Project) - GitHub ↗ | Jan 2025 - Jan 2025
- Developed an Agentic Retrieval-Augmented Generation (RAG) system using LangGraph, LangChain, Google Gemini 2.0 Flash, and Qdrant Vector Database, enabling AI-powered blog search and summarization. Implemented an agentic workflow with LangGraph, incorporating decision-making for document retrieval, conditional edges for relevance, rewriting queries and generating refined answers.

Publications & Achievements

Evolution of Language Representation Techniques | Read Article ↗
A Journey from BoW to GPT | Nov 5, 2024

Hacking the System Design | Read Article ↗
How Search Engines Understand and Deliver Results | Oct 28, 2024

Earned 5 stars in both Python and SQL on HackerRank | HackerRank Profile ↗

Solved 130+ problems on LeetCode | LeetCode Profile ↗