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), Bash (3 years)

Technologies: AWS(EC2, ECR, S3, Lambda), LangChain, 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.

Pharmaceutical Insight Retrieval System (Personal Project) - GitHub ⊠   Jan 2025 - Jan 2025
- Developed an advanced Retrieval-Augmented Generation (RAG) pipeline with similarity search for precise query responses. It is designed to help users gain meaningful insights from research papers and documents in the pharmaceutical domain. It uses LangChain, Google Gemini, ChromaDB and Streamlit.

Text Summarizer App (Personal Project) - GitHub ⊠   Aug 2024 - Sep 2024
- Developed a Text Summarization App that summarizes any text, dialogue, conversation, or article. Utilized the Pegasus model and fine-tuned it with the SAMSum dataset. The results were impressive, successfully summarizing a chat between my friend and me into a concise and clear summary.

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 110+ problems on LeetCode   LeetCode Profile ⊠