Sri Charan Thoutam

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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), MLFlow, Docker, GitHub Actions, Pandas, NumPy, TensorFlow, PyTorch, Scikit-learn, Kubernetes (minikube, kubectl), 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

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.

MNIST Digits Recognition — Personal Project (50 hours) - GitHub ↗   March 2025 - March 2025
- This project focuses on recognizing handwritten digits using a deep learning model trained on the MNIST dataset. The model is deployed as a REST API using FastAPI, packaged into a Docker container and orchestrated using Kubernetes for scalable deployment. The API allows users to upload digit images and receive predictions in real time.

Diamond Price Prediction — Internship Project (80 hours) - GitHub ↗   Oct 2024 - Oct 2024
- Developed a machine learning model to predict diamond prices. Automated a pipeline with stages for Data Ingestion, Validation, Transformation, Training and Evaluation. Set up a DAGsHub Registry for MLFlow Experiment Tracking and Model Versioning. Deployed the app on AWS EC2 for production use.

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 ↗