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EDUCATION

Georgia Institute of Technology, Atlanta, GA

Master of Science in Electrical and Computer Engineering (ML)

GPA: 3.9/4

Veermata Jijabai Technological Institute (VJTI), India

Bachelor of Technology in Electronics & Telecommunication Engineering CGPA: 9.62/10

Relevant Coursework

Generative and Geometric Deep Learning, Data and Visual Analytics, Machine Learning, Technology Entrepreneurship (Teaching Assistant)

EXPERIENCE

NVIDIA, Santa Clara | Generative AI Intern

June 2024 - Aug 2024

May 2025

June 2023

- Developed & fine-tuned an LLM (Llama3) to power a Generative AI-based Retrieval-Augmented Generation (RAG) tool, improving blog generation efficiency.
- Deployed the application via **Gradio on an AWS EC2** instance, creating an interactive frontend for AI-generated content enhancing adoption by 90%.
- Integrated LangChain & LlamaIndex to enhance document retrieval, chunking and indexing.

Georgia Institute of Technology, Atlanta | Student Researcher

Aug 2023 - Dec 2023

- Built **predictive ML models** using scikit-learn to analyze large-scale education datasets, improving academic performance prediction by **5**%.
- Applied **feature engineering & data analysis** (ANOVA, OLS regression) to derive insights on student learning behaviors.

PROJECTS

Math Reasoning in Small Language Models (SLMs)

Sept 2024 - Dec 2024

- Fine-tuned a T5-small transformer model (60M parameters) with LoRA & Chain-of-Thought (CoT) prompting to optimize math reasoning.
- Benchmarked quantized T5-base models, reducing memory consumption by 5% and improving accuracy by 12%

CityScout: Statistics driven Safe City Recommendation System

Sept 2024 - Dec 2024

- Developed a crime risk prediction model using Random Forest & TF-IDF, for region-specific safety analysis.
- Processed & analyzed 2GB+ of crime data using PySpark & Pandas on Google Cloud.
- Built an interactive **Tableau dashboard**, to visualize city-level crime risk scores.

ApplyCation: Automated Job Application Platform

Oct 2024

- Built an automated job application system using Selenium & Claude API, reducing application time by 50%.
- Designed a Streamlit-based UI for user profile management, integrating Flask backend & GCP.

SKILLS

Machine Learning & AI

LLM Fine-Tuning, RAG, LangGraph, OpenAI API, Anthropic API

Backend & Cloud

Python, C++, Flask, AWS,GCP, Docker, PostgreSQL, Linux, React

PyTorch, TensorFlow, Hugging Face, OpenCV, Git

PUBLICATIONS

<u>Predictors of Student Academic Success</u>, ASEE Conference, 2023 – Co-authored a study analyzing academic outcomes in microelectronic circuits.

Computer Vision-Assisted Orientation Estimation, SCL-ISRO Internship, 2022 – Built a visual pose estimation system during internship at Semi-Conducter Lab (now under MeitY).