Gnana Prasuna Nimeesha Vakacharla

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Education

San Jose State University — San Jose, CA
Master's in Data Analytics — Jan 2024 – Dec 2025
Coursework: Probability Distributions, Database Management Systems, Big Data Technologies, Distributed Systems, Agentic AI

Technical Skills

Programming Languages: Python, JavaScript, R, C, SQL, NoSQL, HTML, CSS, Perl, NodeJS, Java, Scala, C++
Machine Learning & Statistical Methods: Scikit-learn, TensorFlow, PyTorch, XGBoost, LightGBM, OpenCV, t-test, Chi-square
Cloud & Data Engineering: AWS (S3, EC2, Lambda), GCP, Azure, Py Spark, Hadoop, Hive, Docker, Kubernetes, CI/CD, Databricks
Data Analysis & Visualization: Pandas, NumPy, Matplotlib, Seaborn, Tableau, PowerBI, AWS QuickSight, Plotly, MS Excel
Deep Learning & Generative AI: CNN, BiLSTM, GANs, Diffusion Models, Transformers, PEFT, LoRA, NLP, LLM, RAG

Experience

Gen AI Engineer Intern — May 2025 – Present
Re-Vive, Texas

- Engineered end-to-end Gen AI dashboard using LLMOps for enterprise **analytics, reducing operational costs by $8M**
- Architected AI summarization engine processing **13K+ service requests**, transforming complex banking workflows into actionable insights for **150+ banking analysts**
- Launched production intelligent dashboard with **20+ AI instruction types**, enabling real-time process monitoring across US/Canada regions for enterprise clients

Data Scientist Intern — May 2024 – Jul 2024
iQuadra, Nellore

- Optimized book recommendation system serving **3M+ users** using Hadoop and PySpark on 5.6GB data, achieving **78% customer engagement improvement**
- Invented 6 MapReduce and ML solutions using collaborative, content-based, and hybrid filtering to analyze user behavior, **reducing processing time by 65%**
- Built Flask application with Plotly BI visualizations, achieving **42% accuracy improvement** and 60% faster response time

Academic Projects

Interview Prep-AI | Python, RAG, Vector DB, Airflow, GCP, Mistral-7B, Llama-4

- Built AI interview simulation platform using fine-tuned LLMs (Mistral-7B, Llama-4), achieving **90% accuracy** and 85% evaluation precision
- Architected scalable data pipeline processing 45+ websites with Airflow/GCP, handling 10x capacity with **40% faster processing**
- Deployed production platform supporting **75+ concurrent users** with vector database optimization, achieving **97% response uniqueness** and <5s optimised query performance

Natural Language Data Retrieval System | Python, LangChain, Agentic AI, OLLAMA, Streamlit, Hugging Face, LLMQPs

- Orchestrated autonomous text2sql agent fine-tuning LLAMA-4 on Spider dataset, achieving **98% accuracy** across 1000+ database schemas with intelligent reasoning capabilities
- Synthesized agentic feedback system with LangChain orchestration and OLLAMA deployment, processing ambiguous queries with 80% clarification success serving **500+ users** reducing complexity **75%**

Agentic AI Travel Assistant | Python, CrewAI, LangChain, OpenAI APIs, PyTorch, FastAPI, Redis, Docker, LLMoPs

- Developed multi-agent AI system using CrewAI/LangChain, processing 500+ academic queries through 4 autonomous agents, achieving **94% accuracy** in travel planning workflows
- Created comprehensive agentic platform combining LLMs with reinforcement learning, generating personalized itineraries for academic evaluation, **demonstrating 92% user satisfaction** across research cohort

DIS-EASIFY | Python, Django, Azure, Scikit-Learn, TensorFlow, Docker, Kubernetes, MLOps

- Pioneered AI healthcare platform using TensorFlow and Django, achieving **97.6%-100% accuracy** across heart disease, diabetes, pneumonia, breast cancer detection
- Streamlined scalable Azure infrastructure with **Docker, Kubernetes CI/CD**, serving **100+ concurrent users** with <2s response times and HIPAA compliance
- Delivered 60% healthcare accessibility improvement through probability-based ML assessments across 5+ datasets, reducing false positives by 85%

Leadership and Achievements

- **Delivered top 8%** in NVIDIA Hackathon, **outperforming 200+ teams** through strategic **innovative technical innovation**
- **Coordinated 500+ student operations** as Department Representative, **streamlining cross-departmental processes**
- **Mastered 6+ years** of Veena and Carnatic music performance, **demonstrating disciplined learning and precision** in cultural events