Rishi Chandan Didigam

AI/ML Engineer

About Me

🎓 Recently graduated from George Mason University in May 2025 with a degree in Computer Science. I'm passionate about exploring the fascinating world of Machine Learning and Deep Learning, constantly seeking to understand how artificial intelligence can solve real-world problems.

My journey in computer science has been driven by curiosity and a desire to push the boundaries of what's possible with technology. I believe in using AI and technology to make a positive impact on the world, one algorithm at a time.

Contact Information

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GitHub: https://github.com/RishiChandan

Education

George Mason University

Master's Degree in Computer Science

Relevant Coursework: Machine Learning, Data Mining, Analysis of Algorithms, Generative Deep Learning

Graduation: May 2025

Skills

Languages: Python, Java, C++, JavaScript, SQL

Frontend: React.js, Tailwind CSS, Vite, HTML5, CSS3, Responsive Design, UI Animations, Dark/Light Mode Toggle

Backend & APIs: FastAPI, Flask, Spring Boot, Django, RESTful APIs, JWT Authentication, Cross-Service Integration

AI/ML & Deep Learning:

- **RAG (Retrieval-Augmented Generation), LangChain, Prompt Engineering**
- **Embedding Models (HuggingFace, OpenAI), Chroma Vector DB**
- **GPT-4.1 Turbo, LLaMA (Ollama), Transformers, CNNs, LSTMs, NLP**
- **Scikit-learn, TensorFlow, Keras, PyTorch, XGBoost**
- **Model Deployment & Serving via APIs**

Data Engineering: Feature Engineering, Data Preprocessing, Model Optimization, Hyperparameter Tuning

MLOps & Experimentation: MLflow, Bayesian Search, A/B Testing, Quantization

Cloud & DevOps: AWS (SageMaker, EC2, Lambda), Azure, Docker, Git, GitHub Actions, Jenkins, CI/CD

Databases: PostgreSQL, MySQL, MongoDB

Tools & Utilities: Uvicorn, Node.js, npm, Python virtual environments, .env API key handling

Work Experience

Software Engineering Intern – SmartIMS (Remote + Hyderabad)

May 2022 – May 2023 and May 2024- Dec 2024
• Engineered scalable backend infrastructure using Spring Boot and Java to power over 30 modules, reducing latency by 22%.
• Designed RESTful APIs and transitioned monoliths into modular microservices, handling 12K+ requests/day.
• Enhanced PostgreSQL performance through indexing, normalization, and batch processing techniques.
• Managed CI/CD pipelines with Jenkins, GitHub Actions, and Git, reducing deployment time by 40%.
• Conducted load/integration testing with JUnit and Postman, ensuring 99.7% API reliability.
• Resolved 100+ software defects in Agile teams, ensuring 15+ stable releases.
• Built classification/regression models using Scikit-learn, XGBoost with 95%+ accuracy on 1TB+ logs.
• Integrated BERT and LLaMA for legal Q&A, achieving 92% retrieval accuracy and 18% F1 improvement.
• Deployed ML models using FastAPI/Flask with optimizations like quantization and prompt tuning.
• Employed MLOps tools (MLflow, Bayesian Search) and A/B testing to improve performance by 20%.

Projects

• Rocket AI Portfolio Assistant: A GPT-powered interactive portfolio that uses RAG (Retrieval-Augmented Generation) and vector search to answer questions about me in real-time. Includes typing animations, dark/light themes, and a React + FastAPI frontend/backend integration.
GitHub: https://github.com/RishiChandan/rocket-ai-portfolio

•**LangChain File Assistant (Agentic AI Demo)**

The assistant allows you to upload PDFs, generate embeddings, and query documents using a conversational agent. It's built to demonstrate practical knowledge of agentic AI, tool usage, and multi-modal retrieval-augmented generation (RAG).

Github https://github.com/RishiChandan/LangChain_File_Assistant

•**DGAAL :** Deep Graph Attention and Adversarial Learning using PyTorch for advanced graph neural networks and data analysis.
github: https://github.com/RishiChandan/DGAAL

•Stock Price Prediction

LSTM-based time series forecasting for stock market movement prediction using technical indicators.

Github: https://github.com/RishiChandan/stock-price-prediction

•Eigenfaces OpenCV

PCA-based facial recognition project using OpenCV to demonstrate dimensionality reduction and image processing.

Github https://github.com/RishiChandan/Eigenfaces_OpenCV