

Srisaicharan Mandapati

732-318-9485 | smandapati100@gmail.com | [linkedin.com/in/srisaicharan-m](https://www.linkedin.com/in/srisaicharan-m) | github.com/smandapati1

EDUCATION

Rutgers University

New Brunswick, NJ

Bachelor of Science in Computer Science, Minor in Economics

Sep. 2023 – May 2027

- **Relevant Coursework:** Data Structures, Algorithms, Principles of Programming Languages, Internet Technology, Computer Architecture, Linear Optimization
- **Dean's List:** 2023, 2025, 2026

EXPERIENCE

AI Engineer Intern

March 2026 – Present

MSH Global

Hillsborough, NJ

- Built an end-to-end RAG pipeline for insurance document Q&A, chunking policy PDFs, generating embeddings via OpenAI/Cohere, and querying Pinecone to synthesize citation-grounded, LLM-generated responses.
- Engineered prompt templates and retrieval strategies to improve answer faithfulness and reduce hallucinations, iterating via automated evaluation metrics and incorporating feedback into iterative agent improvement cycles.
- Shipped a React frontend with a streaming chat UI backed by a middleware retrieval-synthesis service deployed on Microsoft Azure, delivering a product surfacing source citations and confidence signals to non-technical stakeholders.

Software Engineering Intern

June 2023 – August 2024

Sita Corp

Somerset, NJ

- Engineered backend enterprise services in Java and SQL, designing automated validation pipelines that reduced manual data processing overhead by 35%, improving operational throughput.
- Diagnosed and resolved production-level defects through systematic root cause analysis, enforcing database integrity constraints and optimizing query reliability, reducing error rates by 25%.
- Authored and reviewed unit and integration tests using JUnit within Agile development cycles integrated with CI/CD pipelines, reducing regression defects and accelerating feature delivery velocity by 20%.

PROJECTS

Multi-Agent Research Analyst | *LangGraph, LangChain, Pinecone, Cohere, Ragas*

May 2026 – Present

- Designing a LangGraph-orchestrated multi-agent system where a planner agent decomposes research queries, dispatches retriever, web search, and critic sub-agents, and synthesizes citation-grounded reports.
- Critic agent cross-references claims across all retrieved documents to detect source contradictions and recency gaps, incorporating structured conflict output into each iterative agent improvement cycle.
- Implementing agent evaluation and feedback management using Ragas (faithfulness, answer relevancy, context precision) and LangSmith tracing for per-agent latency and token cost across the full pipeline.

SignBridge | *Python, OpenCV, MediaPipe, scikit-learn, Flask, WebSocket*

March 2026 – Present

- Built a real-time ASL recognition pipeline using MediaPipe hand tracking, extracting 21 3D landmarks per frame and classifying into 26 ASL letters via a Random Forest classifier at 30fps on CPU with 100% test accuracy.

EWS-ML | *Python, XGBoost, SHAP, Flask, scikit-learn*

June 2025 – Aug. 2025

- ML-powered tool predicting patient deterioration 6–12 hours in advance from time-series vital sign data with explainable AI outputs (SHAP) and interactive clinical risk dashboards to automate early intervention workflows.

EcoAlpha | *Python, FinBERT, HuggingFace, Streamlit, PyPortfolioOpt*

June 2025 – Sep. 2025

- Streamlit app integrating FinBERT ESG sentiment analysis from SEC 10-K filings with mean-variance portfolio optimization for non-technical stakeholders.

LEADERSHIP & ORGANIZATIONS

Venture Lab Fellow

March 2026 – Present

Grey Matter Society, Rutgers University — Affiliated with Yale Medical School

New Brunswick, NJ

- Selected for the inaugural cohort of the healthcare-track accelerator via the competitive Launch Circuit program.
- Developing BillFight, an AI-powered medical bill dispute platform using NLP to identify billing errors and automate insurance appeals.

TECHNICAL SKILLS

Languages: Python, Java, JavaScript/TypeScript, C/C++, SQL, HTML/CSS, R, OCaml

Generative AI & LLMs: OpenAI API, LangChain, LangGraph, Cohere, Pinecone, Vector Databases, RAG Pipelines, Prompt Engineering, Agent Workflow Orchestration, Agent Evaluation (Ragas, LangSmith), HuggingFace

Frameworks: React, Flask, FastAPI, Node.js, WebSocket, REST APIs, JSON, JUnit

Developer Tools: Git, GitLab CI/CD, Docker, Google Cloud Platform, Microsoft Azure, VS Code, IntelliJ, AI Coding Assistants (Claude, GitHub Copilot)

ML Libraries: scikit-learn, PyTorch, Pandas, NumPy, MediaPipe, OpenCV, SHAP, XGBoost