

Snigdha Gayathri Mandapati

AI & ML Developer | Agentic AI | Generative AI | CSE – (AI & ML) Undergrad
+91 8247310334 | snigdhaisme@gmail.com | [LinkedIn](#) | [GitHub](#) | [My Portfolio](#)

PROFESSIONAL SUMMARY

Results-driven AI & Machine Learning specialist, actively building autonomous AI agents and intelligent systems powered by neural networks and deep learning (TensorFlow, PyTorch). Experienced in full-cycle development: training deep models, optimizing performance, and deploying production-ready ML solutions via Flask REST APIs with robust evaluation (F1-score, ROC-AUC, RMSE) and monitoring. Strong foundation in generative techniques and end-to-end AI applications, delivering scalable, impactful outcomes through code, experimentation, and real-world deployment.

SKILLS

AI Agents & Agentic AI — Autonomous agents, intelligent workflows, LLM and Transformer integration
Full-Stack & Web Development — React.js, JavaScript, HTML, CSS, MEAN Stack, frontend UI/UX, dynamic web apps
Backend & APIs — Flask REST APIs, Python backend, API integration (REST, JSON), MySQL
Deep Learning & Neural Networks — TensorFlow, PyTorch, Transformers, Hugging Face, generative models (GANs)
Programming Languages — Python, JavaScript, TypeScript, Java, C++, SQL
Tools & Dev Practices — Git, Docker basics, CI/CD, Jupyter, Pandas, NumPy, VS Code, problem-solving
Machine Learning & Data — Model training and optimization, evaluation metrics (F1, ROC-AUC, RMSE), data pipelines

TECHNICAL EXPERIENCE

Machine Learning Intern – Cognifyz Technologies **January 2025 – March 2025**

- Engineered 10+ supervised ML models from scratch, achieving 95% accuracy via feature engineering, GridSearchCV tuning, and cross-validation.
- Deployed Flask REST APIs for real-time inference (sub-200ms latency on 10K+ daily records) with data validation and ~30% drift reduction via monitoring/retraining.

Software Developer Intern – Technical Hub Pvt. Ltd. **June 2024 – August 2024**

- Built custom classification pipelines, boosting retrieval accuracy 40% and cutting dimensionality 60% through optimized feature selection.
- Optimized ML inference pipeline, reducing processing time 35% with batch predictions and metrics tuning; enabled 25% faster model iterations via production monitoring.

PROJECTS

Smart Shelf AI – Quantum Book Recommendation Engine

- Developed hybrid recommendation system with collaborative filtering and quantum similarity; engineered 15+ features, improving precision 32% and RMSE 0.82.
- Delivered adaptive features like read tracking, feedback refinement, visual analytics, and conversational AI interface for personalized evolving recommendations.

Placement RAG Agent

- Engineered **AI-optimized RAG system** using React 18 + Gemini API, retrieving from 250+ placement knowledge base (DSA/DBMS/OS/CN/HR) for personalized interview prep.
- Optimized client-side RAG pipeline for <2s latency on zero-backend Render SPA, achieving 100% infrastructure cost reduction.

NeuroPlan AI – A Multi Agent system

- Engineered a multi-agent adaptive learning system that dynamically optimizes personalized study plans using cognitive modeling, mastery scoring (0-1), retention decay prediction, and constraint arbitration.
- Built six specialized cognitive agents with real-time performance feedback loops and intelligent arbitration to create continuously self-correcting adaptive schedules.

EDUCATION

B.Tech in Computer Science & Engineering (AI/ML) – Aditya University, Surampalem 2022 – Present | CGPA: 8.26
Intermediate (MPC) – Siddhartha Junior College, Tuni | GPA: 9.0 | 2022
Secondary Education, CBSE – Sri Prakash Vidya Niketan, Payakaraopeta | GPA: 9.32 | 2020

CERTIFICATIONS & ACHIEVEMENTS

Certifications: IBM (MLwith Python, DL Fundamentals, Data Science 101) | Microsoft Azure AI Fundamentals | Career Essentials in Generative AI by Google | Pearson IT Specialist – Java
Coding Achievements: Gold Badges in C++, Java, Python (HackerRank) | GeeksForGeeks Rank: 40 | Code360: Ninja Dominator

LINKS

[LeetCode](#) | [GeeksForGeeks](#) | [HackerRank](#) | [Code360](#) | [CodeChef](#)