

Meka Durga Sai Vardhan Reddy

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SUMMARY

AI/ML engineer building agentic LLM systems and deep learning models in Python. Shipped a multi-agent trading framework with live WebSocket ingestion, multi-provider LLM fallback routing, schema-validated outputs, and confidence-based risk gating. Background in Transformer NLP, RAG, and explainable ML, with full-stack delivery across FastAPI, React.js, and Node.js.

EXPERIENCE

- Machine Learning Engineering Intern** — FlyRank Corp. (Remote) Jul 2026 – Sep 2026
- Completed FlyRank's AI engineering cohort: 15 assignments across data wrangling, embeddings and clustering, intent and opportunity modeling, and insight to action, plus the accepted capstone detailed under Projects.
- Cybersecurity AI/ML Researcher (Intern)** — SwiftSafe Cybersecurity Technologies (Remote) Mar 2026 – Jul 2026
- Built machine learning components for anomaly detection, risk scoring, and security-monitoring pipelines running on real operational data.
 - Developed Python backend services and data-processing workflows for cybersecurity automation within a distributed remote team.
- Independent AI/ML Engineering** — Self-Directed Jun 2025 – Feb 2026
- Designed and built Quintyx (github.com/mdsvr/Quintyx), a multi-agent LLM trading framework — async indicator engine, provider fallback routing, JSON-schema validated outputs, and a FastAPI/WebSocket service layer.
 - Went deep on the agentic stack: MCP, local inference (Ollama), vector retrieval (FAISS, ChromaDB), LLM orchestration and evaluation.

PROJECTS

- CTR & Engagement Opportunity Scoring — FlyRank Capstone** Jul 2026 – Sep 2026
Applied ML (Python, scikit-learn) — github.com/mdsvr/flyrank · mdsvr.github.io/flyrank
- Ranked 12,023 content items across 28 clients into a ~50-slot editorial review queue — decision support, with a human in front of every item.
 - Selected an 8-feature logistic regression from 16 configurations under nested cross-validation, choosing the smallest model because no configuration won stably across outer folds.
 - Validated on client-grouped 5-fold splits after adversarial validation scored 0.961 AUC: ROC AUC 0.631 vs 0.577 and precision@50 0.90 vs 0.68 against a transparent rule baseline (0.599 base rate).
- Quintyx — Autonomous Multi-Agent AI Trading Framework** Jun 2025 – Feb 2026
Agentic AI System (Python) — github.com/mdsvr/Quintyx
- Built an autonomous AI stock-analysis agent for Indian (NSE/BSE) and US markets that ingests live data, calls tools, reasons over multiple signals, and returns gated BUY/SELL/HOLD decisions.
 - Engineered the pipeline: live WebSocket market feeds (Fyers API) into an async parallel indicator engine (EMA, MACD, RSI, OBV, VWAP, ATR; 5–20x speedup over serial evaluation), Hurst-exponent regime detection, and 0–100 confidence scoring.
 - Implemented resilient multi-provider LLM routing (Gemini 2.0 Flash → OpenRouter → OpenAI → offline deterministic engine) so reasoning degrades gracefully instead of failing mid-stream.
 - Added autonomous safety guardrails — an ATR-based risk gate blocking trades below 55% confidence, plus JSON-schema output validation — served through a FastAPI + WebSocket dashboard streaming predictions tick-by-tick.
- AI-Powered Cost Analysis for Textile Production** Sep 2024 – May 2025
Senior Design Project, VIT-AP University
- Built a cost-analysis system using XGBoost with genetic-algorithm hyperparameter optimization ($R^2 = 0.94$) and SHAP-based explainability for pricing and profitability insights.
- Multilingual Text Classification — Transformer & LSTM** Nov 2023 – Feb 2024
Deep Learning (Python, PyTorch/TensorFlow) — github.com/mdsvr/languagedetection
- Implemented LSTM and Transformer classifiers from research papers for 20+ language identification, with a full training, evaluation and inference pipeline.
- Smart E-Commerce Platform with Dynamic Pricing** Aug 2023 – Dec 2023
Full-Stack Web Application — github.com/mdsvr/Smart-Ecommerce
- Built a two-sided marketplace (React.js, Node.js, MongoDB) with REST APIs delivering sub-second pricing responses, backed by XGBoost + SHAP for dynamic, explainable pricing.

SKILLS

Deep Learning & ML: PyTorch, TensorFlow, Transformers, LSTM/CNN, Hugging Face, scikit-learn, XGBoost, SHAP, NLP, RAG, Semantic Search

Agentic AI & LLMs: LLM Orchestration & Fallback Routing (Gemini, OpenRouter, OpenAI), Tool Use / Function Calling, MCP, Local Inference (Ollama), Vector Databases (FAISS, ChromaDB)

Languages: Python, JavaScript, Java, SQL

Backend, Databases & Tools: FastAPI, WebSockets, Node.js, Flask, REST APIs, PostgreSQL, MongoDB, MySQL, Docker, Git/GitHub, Streamlit

EDUCATION

VIT-AP University — B.Tech in Artificial Intelligence & Machine Learning Jul 2021 – Jun 2025
CGPA: 7.65 / 10

CERTIFICATIONS

Machine Learning Internship, Certificate of Completion — FlyRank, 2026 · Anthropic Academy, 2026 — 7 courses across Claude, Claude Code, and AI Fluency · OCI Generative AI Professional & AI Foundations Associate — Oracle, 2025 · Responsible & Safe AI Systems — NPTEL · AI for Cyber Security (IBM QRadar) — SmartBridge, 2023