SRISHANTH TADAKALA

AI / ML SYSTEMS ENGINEER

Location: India | Education: Marwadi University ? B.Tech CSE (AI/ML)
GitHub: github.com/srishanthtadakala | Portfolio: THE SYSTEMS ATLAS

SUMMARY

AI/ML Systems Engineer focused on building intelligent systems that connect
foundational AI models, autonomous multi-agent architectures, voice intelligence,
and real-world digital twin environments.

FEATURED ENGINEERING SYSTEMS

1. F.R.I.D.A.Y. ? Digital Twin & Multi-Agent Orchestration System
   - Architected distributed edge-to-cloud telemetry and multi-agent control plane.
   - Implemented deterministic tool allowlisting, state synchronization, and mission control.
2. VOICE AGENT ? Low-Latency Expressive Conversational AI
   - End-to-end streaming audio pipeline: VAD -> ASR -> Agentic Reasoning -> Tool Execution -> TTS.
   - Sub-400ms turn-taking latency with semantic interruption handling.
3. ML RESEARCH LAB ? Applied Deep Learning & Representation Engineering
   - Empirical benchmarking across neural manifolds, edge quantization, and safety filters.

CORE COMPETENCIES

- AI Systems: Multi-Agent Orchestration, Tool-Use Sandboxing, RAG, Deterministic Guardrails
- Voice AI: Streaming VAD/ASR, Prosody Control, Real-Time WebRTC/WebSocket Audio Pipelines
- Digital Systems: Spatial Computing, Digital Twins, Edge Telemetry, High-Frequency UI
- Machine Learning: PyTorch, Transformer Architectures, Model Evaluation & Alignment