

## ✓ PROFESSIONAL SUMMARY

Full Stack AI Engineer with Master's in Software Engineering (AI focus). Built a **privacy-first AI platform** running entirely offline - data never leaves your device. Deployed **22 ML engines** on a single GPU via novel semaphore design. I bring a **reliability-first mindset** to ML engineering, creating documented processes that save six figures and automation that becomes the team standard.

## ⚙️ CORE COMPETENCIES

### 🧠 AI/ML

Deep Learning, Neural Networks, NLP, PyTorch, Generative AI, Prompt Engineering, Real-Time ASR (NVIDIA Parakeet), Speaker Diarization, RAG (FAISS + MiniLM), LLM Integration, Emotion Analysis, Causal Inference, Time-Series Forecasting, Graph Neural Networks

### 👤 MLOps & Infra

GPU Optimization & Semaphores, Docker, Kubernetes, Istio Service Mesh, CUDA, Redis, PostgreSQL, Prometheus, OpenTelemetry, CI/CD, HPA Autoscaling, Model Deployment

### <> Software Eng

Python, FastAPI, REST APIs, WebSocket, Microservices, RBAC, JWT/mTLS Authentication, Playwright E2E Testing, Event-Driven Design

### ☁️ Cloud & DevOps

Linux, AWS (S3, Lambda, EC2), Git, Agile, Infrastructure as Code, Flutter, Dart, Deepgram STT, n8n Workflow Automation

## ★ SIGNATURE PROJECT

### Cognitive AI Orchestration Platform (NeMo\_Server)

★ FEATURED

300K+ Lines of Code

- Built **22 specialized ML engines** (AutoML, Monte Carlo, Granger causality, time-series forecasting, Graph Neural Networks) with System 2 cognitive architecture for mathematical validation of LLM outputs
- Solved GPU contention via Redis-backed semaphore design enabling **Gemma 3-4B + NVIDIA Parakeet ASR** to coexist within 6GB VRAM with preemptive context-switching
- Architected **zero-trust security**: mTLS authentication, encrypted vector stores (FAISS + SQLCipher), rotating JWTs, and comprehensive threat modeling
- Deployed **13 containerized microservices** via Docker/Kubernetes (Istio, HPA autoscaling, GPU time-slicing) with FastAPI gateway implementing RBAC and OpenTelemetry tracing
- Built **Flutter mobile app** with Deepgram real-time STT and **Fiserv DNA banking API** integration for enterprise account/transaction management

## PROFESSIONAL EXPERIENCE

- **BTI Solutions** June 2024 - June 2025  
**Network Engineer** | San Diego, CA
  - Created **ADB automation scripts** to streamline morning workflows, methodically deploying across every office workstation and improving testing deadline adherence
  - Executed Samsung 5G/LTE site validation while maintaining strict uptime SLAs for Tier-1 U.S. carriers
  - Authored ISO 9001-compliant SOPs and trained field teams on structured troubleshooting methodologies
- **Wyyerd Fiber** 2022 - 2024  
**Fiber Optic Technician** | Casa Grande, AZ
  - Integrated **Lean engineering principles** into field workflows, developing probability-ranked troubleshooting knowledge base that delivered **\$100K+ annual cost savings**
  - Trained technicians on root-cause analysis (5 Whys, Fishbone) to consistently exceed SLAs
- **SubCom** 2016 - 2020  
**Integration Technician** | Newington, NH
  - Re-engineered fiber inspection workflow reducing inspection time by **50%** and doubling throughput on subsea cable projects
  - Designed training methodology minimizing technician errors and protecting multi-million dollar project timelines

## EDUCATION

### Master of Science in Software Engineering

**AI Engineering Specialization**

 Western Governors University

### Bachelor of Science in Computer Science

**Graduated with 3.94 GPA**

 University of the People

## ★ WHAT STANDS OUT

Every role tells the same story: **I find inefficiencies and fix them systematically.** As a **Lean Six Sigma Green Belt**, I have always approached challenges with rapid iteration and continuous improvement. Now, I leverage AI tools to accelerate that process - using intelligent automation to prototype faster, document more thoroughly, and deliver production-ready solutions in a fraction of the time. From re-engineering fiber workflows that doubled throughput to designing GPU semaphores running 22 ML engines on constrained hardware, I combine structured process thinking with modern tooling. The result: I ship higher-quality work faster than ever, and I document every solution so the team never faces that problem again.