Nehanth Narendrula

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EDUCATION

The University of Texas at Dallas — **December 2025**
Bachelor of Science in Computer Information Systems and Technology — *Dallas, TX*

EXPERIENCE

Red Hat — **May 2025 – August 2025**
Machine Learning Engineer Intern — *Boston, MA*
- Designed and implemented inline and remote post-training providers for **Direct Preference Optimization (DPO)** in **Llama Stack**, enabling scalable multi-GPU **distributed fine-tuning**.
- Proposed and built a post-training pipeline for **RAG systems** using **contrastive learning** and a **neural fusion model** to blend dense, sparse, and metadata signals, boosting **retrieval accuracy**.
- Researched and prototyped a decentralized LLM inference system by building a private peer-to-peer mesh network with **dynamic layer-wise model sharding**, enabling scalable LLM inference.

Red Hat — **May 2024 – August 2024**
Software Engineer Intern — *Raleigh, NC*
- Architected a **query classification system** for OpenShift Lightspeed's LLM layer by training and integrating an ML model to **filter** OpenShift-specific queries and prevent excessive compute usage.
- Led development of telemetry reporting and **S3-based data ingestion**, using NLP to generate **automated KPIs** and implementing CI/CD pipelines to support iterative product improvement.

Blackstone (LaunchPad) — **June 2023 – May 2024**
Software Engineer Intern — *Dallas, TX*
- Developed an automated content optimization system leveraging GPT-4 API to generate **context-aware website content**, increasing user engagement and overall site traffic by more than **15%**.
- Engineered a **data-capture module** enabling efficient lead generation and visitor data collection, boosting marketing operations effectiveness by 3% and streamlining business-intelligence processes.

STARTUP EXPERIENCE

Spin (Concluded) | *Python, FastAPI, OpenAI API, Supabase, Terraform, React.js* — **www.tryspin.io**
Founder & Founding Engineer — *Demo Video*
- Built Spin, a multi-cloud platform enabling natural language-driven **infrastructure provisioning**.
- Progress: Developed an LLM-driven agentic orchestration pipeline spanning AWS, GCP, and Azure.

DietAI (Acquired) | *Python, Swift, SwiftUI, FastAPI, OpenAI Vision API* — **www.dietapp.ai**
Founding Engineer & Advisor — *App Link*
- Joined and co-built DietAI, a mobile app utilizing **AI image classification** for calorie counting.
- Progress: Achieved product growth to **50,000 downloads** and secured an acquisition in 8 months.

PROJECTS

DecentraHealth | *Python, Flask, Node.js, OpenCV, TensorFlow, IPFS* — **Demo Video**
- Bootstrapped DecentraHealth, a fully serverless decentralized telemedicine platform with IPFS-based video conferencing and **AI-powered diagnostics**, designed for reliable use in disaster zones.

Meta Glasses Enhancement | *Python, JavaScript, Node.js, Browser Use API* — **Blog Post**
- Discovered and created a system to enhance Meta Ray-Ban Glasses capabilities by enabling **voice commands** to communicate with a server for advanced task execution without an official SDK.

TECHNICAL SKILLS

Languages: Python, JavaScript, Java, Go, Swift, Bash, SQL
Frameworks & Libraries: Llama Stack, FastAPI, Node.js, React.js, PyTorch, TensorFlow, TRL
Developer Tools: AWS, Git, Terraform, Supabase, Kubernetes, Docker, torchrun, GitHub Actions
Interests/Hobbies: Hackathons, Tech Conventions, Nintendo Gaming, Cafe Hoping, Rock Climbing