PRIYANKA GANESAN

■ 832-406-0427 | ✉■ gpriyankapms@gmail.com | LinkedIn | Portfolio | GitHub

EDUCATION

University of Texas at Dallas – Dallas, TX
M.S. in Computer Engineering (Machine Learning specialization) — May 2026
B.S. in Computer Engineering — May 2024
Relevant Coursework: Machine Learning, Distributed Systems, Algorithms, Networking, Operating Systems, Data Structures

EXPERIENCE

Graduate Research Engineer – Edge Systems & Machine Learning
Smart Nanoelectronics Lab, Dallas, TX | Aug 2024 – Present
• Built and deployed quantized DNNs on embedded edge devices (ESP32) achieving 97.03% accuracy, 1 ms latency, and 1.6 KB RAM usage.
• Designed telemetry pipelines, debugging tools, and performance monitors for real-time stress detection and system reliability.
• Benchmarked LSTM, CNN, and SVM models, improving compute efficiency by 30% while maintaining AUC = 0.98.
• Published research at ACM GLSVLSI ’25 on resource-efficient ML deployment for low-power edge systems.

Full-Stack Software Engineer
IngeniuZ AI, Dallas, TX | Feb 2025 – May 2025
• Developed microservices architecture using JavaScript, GraphQL, and Postgres, improving budgeting analytics by 30% across 1.2K+ user sessions.
• Integrated RAG-based AI module using LLMs and retrieval pipelines, increasing adoption of AI insights by 25%.
• Implemented CI/CD pipelines, automated tests, and API monitoring, achieving 97.8% uptime and 20% faster release cycles.

Data Engineering Intern
Schlumberger (SLB), Houston, TX | May 2023 – Aug 2023
• Developed Python ETL pipelines for 5M+ records from Azure SQL, enabling real-time analytics and improved reliability.
• Created optimized SQL extraction layers, reducing query time by 55% for scalable data operations.
• Automated deployments using Azure Functions and CI/CD workflows, enhancing security and compliance.

PROJECTS

Guiding Eye AI
Built a wearable navigation system integrating Whisper (speech-to-text), edge vision models, and Google Maps API. Optimized inference for <1.5s latency; designed scalable low-power ML pipelines.

ECG-Based Biometric ID (TinyML)
Trained CNN/DNN models achieving 97.8% accuracy; evaluated inference latency and flash utilization using Edge Impulse.

In-Video Search System
Developed semantic video retrieval using VisionGPT and AWS Timestream with sub-second latency.
Engineered multi-threaded pipelines for content moderation and asset management.

SKILLS

Programming: Python, C++, Java, JavaScript, SQL

Machine Learning: TensorFlow, PyTorch, Edge AI, LLMs, LangChain, Pinecone

Cloud: Azure (SQL, Functions), AWS, Docker, Kubernetes

DevOps: CI/CD, GitHub Actions, API Design, Telemetry, Logging

Databases: GraphQL, Redis, Postgres

Focus Areas: Distributed Systems, Edge Computing, Cloud Infrastructure, Performance Optimization

LEADERSHIP & IMPACT

• Student Venture Capitalist – Capital Factory: Conducted market research and deal analysis for 20+ early-stage startups.
• VP of Finance – Entrepreneurial Leaders Council: Supported 120+ student startups across DFW.
• External Relations – Society of Women Engineers: Partnered with 64+ companies to expand mentorship programs.
• Program Director – StartupHack: Organized startup hackathon with 12 sponsors and 200 participants.