

Noel Emmanuel

U.S. Citizen | Dallas, TX | (210) 535-0802 | noel.emmanuel20@gmail.com | [LinkedIn](#) | [GitHub](#)

EDUCATION

University of Texas at Dallas

Dallas, TX

Bachelor of Science in Computer Science

December 2026

- **Relevant Coursework:** Data Structures and Algorithms, Software Engineering, Artificial Intelligence, Machine Learning, Computer Vision
- **Certification:** AWS Cloud Practitioner (CLF)

EXPERIENCE

IBM

San Jose, CA

Software Engineering Intern

May 2026 – August 2026

- Built **multi-agent RAG pipeline** for manual QA-to-**Playwright** migration, raising valid script output to **90%**
- Enforced **schema-validated** LLM output against a 3.5K-signature catalog, blocking **hallucinated API calls**
- Created **vector retrieval** for Playwright fixtures, improving correct fixture selection in generated tests by **40%**

Signet Jewelers

Dallas, TX

AWS Developer Intern

May 2025 – May 2026

- Built AWS automation tooling for Lambda setup, saving **three sprints** of backend boilerplate work
- Developed **LLM-based QA validation** for required and optional fields, reducing manual test review by **40%**
- Fixed **Node.js** and **oracledb** failures blocking production Lambda upgrades across backend services

PROJECTS

Hydra | Python, TypeScript, Next.js, NVIDIA Nemotron

- Built node-based editor for designing **multi-agent workflows** from structured **JSON graph** definitions
- Implemented **RAG** and tool-calling execution to run **10+ step agent pipelines** with external context
- Added **execution tracing** and run replay to debug prompts, tool outputs, and failed agent runs

OneFace | TypeScript, Next.js, AWS Rekognition, DynamoDB, S3, API Gateway

- Built facial attendance platform with **REST APIs**, **S3 uploads**, and **AWS Rekognition** for **50+ users**
- Implemented face enrollment and search using Rekognition thresholds and DynamoDB user metadata

CareLock | Go, Kafka, PostgreSQL, Redis, Raft, Docker, Kubernetes

- Built distributed healthcare record prototype using **Go**, **Kafka**, **PostgreSQL**, and **Redis**
- Implemented **Raft-style leader coordination** to enforce single-writer patient record updates

LEADERSHIP

Association of Computing Machinery at UTD

Dallas, TX

Project Manager

Apr 2024 – Present

- Led **4-student engineering teams** through scoping, sprint planning, implementation, and final demos
- Reviewed designs and pull requests, unblocking **API integration**, data flow, and architecture issues

TECHNICAL SKILLS & INTERESTS

Languages: Python, Java, TypeScript, C++, Go, JavaScript, SQL, C#

Technologies: React, Next.js, AWS, Lambda, DynamoDB, S3, PostgreSQL, Kafka, Redis, Docker, Kubernetes

Tools: Git, PyTorch, Pandas

Interests: Volleyball, Pickleball, Weightlifting, Hiking, Travel