

# Joshua Lee

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## EDUCATION

Texas A&M University – College Station, TX

Expected 12/2027

B.S. in Computer Science | Minor in Statistics | GPA: 3.7/4.0 | *Engineering Honors*

*Available for Summer 2026*

## SKILLS

- **Languages:** Python, C++, JavaScript, TypeScript, Java, HTML, CSS, SQL
- **Frameworks/Tools:** React, Node.js, Spring Boot, Flask, PyTorch, Docker, PostgreSQL, Neo4j, Kafka, AWS, Git, Linux

## CERTIFICATIONS

Building with the Claude API | Anthropic

04/2026

## EXPERIENCE

Software Engineer Intern | MegaGen America (Fair Lawn, NJ)

06/2024 – 08/2024 & 05/2025 – 08/2025

- Automated a manual warranty process by developing a high-availability **React**-based portal that auto-generates RMA numbers and standardized PDFs, projected to reduce customer callback rates by **90%** through UI/UX optimization.
- Engineered **large-scale multi-tier cloud infrastructure** using **AWS S3** and **IAM** to manage technical assets for users across **100+ countries**, ensuring high throughput and secure access.
- Refactored **1,000+ lines** of legacy code to improve modularity and long-term maintainability, adhering to **Agile** methodologies across distributed engineering teams.

Product Manager / Software Engineer Intern | Allen Police Department (Allen, TX)

02/2024 – 05/2024

- Modernized a legacy **Microsoft Access** system by migrating **5,000+ vehicle records** into a high-performance **SQL database**, significantly improving retrieval speeds.
- Executed **full-stack** feature development to deliver secure reporting tools and management dashboards with **UI/UX** tailored for field officers.
- Served as primary liaison between engineering and law enforcement, delivering **weekly progress reports** and translating officer feature requests into actionable technical specifications.

Summer Researcher | University of Texas at Dallas (Richardson, TX)

05/2023 – 07/2023

- Optimized classification algorithms to achieve **85-91% predictive accuracy** across **thousands of clinical data points**, focusing on feature extraction and data integrity.
- Synthesized **machine learning** models using **Python** and **regression statistics** to analyze biomedical datasets containing **10,000+ data points** for disease diagnosis.

## PROJECTS

Fraud Ring Detection System | *Java, Spring Boot, Python, PyTorch, Kafka, Neo4j, Docker, React, TypeScript* 02/2026

- Architected a real-time fraud detection pipeline (**7k+ LOC**) using **Apache Kafka** to ingest streaming financial transactions at **sub-rooms latency** across a **5-container** Dockerized microservices stack.
- Engineered a **GraphSAGE Neural Network** in PyTorch, dynamically extracting **2-hop subgraphs** from **Neo4j** into **10-dimensional feature tensors** for real-time fraud inference across **170+ simulated entities**.
- Built a live **React/Cytoscape.js** dashboard via **WebSockets** pushing AI-scored transactions and graph topologies to the frontend in **under 50ms**, eliminating client-side polling.

Real-Time Financial Analysis System | *React, Node.js, Python, Flask, PostgreSQL*

01/2026

- Architected a secure financial dashboard using **React** and **Node.js**, backed by **PostgreSQL** with **Prisma ORM** for relational invoice tracking.
- Engineered a **Python/Flask** microservice with **Scikit-Learn** Naive Bayes classification to automatically categorize transactions and summarize spending trends.
- Designed an interactive frontend with **real-time visualizations** and a custom **concurrency-aware** payment scoring algorithm, ensuring high performance under load.

## AWARDS & HONORS

American Express Discovery Program | Phoenix, AZ

02/2026

- Selective, application-based program with **~2% acceptance**; networked with AmEx engineers, recruiters, and executives through an immersive multi-day office experience.