

# FRANCK TAYO

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## EDUCATION

**Bachelor of Science in Computer Science | 4.0 GPA,**  
Kennesaw State University

05/2026 | Marietta, GA

**Coursework:** Data Structures & Algorithms, Database Systems, Operating Systems, Parallel Computing, AI, Linear Algebra, Probability & Statistics, Calculus, Computer Organization, Big Data, Software Engineering

## TECHNICAL SKILLS

### Languages & Frameworks

Python, TypeScript, JavaScript, Java, SQL, FastAPI, React.js, Vite, Node.js, Spring Boot

### Tools & Technologies

PostgreSQL, SQLAlchemy, Docker, AWS S3, Git, CI/CD, REST APIs, JWT, Postman, Redis, AWS (SageMaker, Bedrock)

## EXPERIENCE

### Software Engineer Intern, PACI

12/2024 – Present

- Led database migration from SQLite to PostgreSQL to improve platform scalability for 1,000+ alumni users, achieving zero downtime and maintaining 100% data integrity throughout the transition
- Architected full-stack resume review system with TypeScript/React (Vite) frontend and FastAPI backend, integrating AWS S3 for secure document storage with role-based access control across student, reviewer, and admin roles serving 1000+ users
- Built RESTful APIs with FastAPI/SQLAlchemy and implemented CI/CD pipeline with automated testing for pull request validation, reducing manual processing time by 80% and establishing production-grade deployment workflows

### Software Support Engineer Intern, Intelligentsia SA

05/2023 – 08/2023

- Engineered Python automation scripts to eliminate manual log processing for ATM diagnostics, reducing system analysis time by 60% and improving issue resolution speed across 200+ banking terminals
- Collaborated with engineering team to maintain real-time monitoring systems, ensuring 99.5% uptime for payment infrastructure serving financial institutions

## PROJECTS

### Movie Recommendation Platform, React.js, Node.js, Scikit-learn ↗

- Engineered vector-based retrieval pipeline using TF-IDF embeddings and cosine similarity achieving 90% accuracy on 10,000+ movie dataset, demonstrating understanding of semantic search and ranking systems
- Implemented collaborative filtering algorithms for personalized recommendations with content-based features
- Delivered sub-2-second response times through optimized caching and asynchronous processing with query optimization, evaluated retrieval quality using precision@k and recall@k metrics
- Built complete ML pipeline from data preprocessing and feature engineering to model training and production

### CacheGrid: High-Performance Distributed Cache System, Python, FastAPI, Docker ↗

- Developed Redis-compatible distributed caching system designed to accelerate ML inference workloads, serving 1,000+ requests/second with sub-10ms latency
- Implemented LRU/LFU eviction policies managing 10,000+ cached items with TTL support, applicable to model serving infrastructure - Deployed via Docker with real-time health monitoring and performance metrics

### Restaurant POS Backend System, Python, FastAPI, PostgreSQL ↗

- Designed secure RESTful API to modernize restaurant transaction processing, implementing role-based access control for user types supporting 100+ concurrent requests with ACID compliance across 1,000+ daily transactions
- Achieved 99.9% security coverage with JWT authentication and bcrypt hashing, reducing administrative overhead by 90% through automated CRUD endpoints

## LEADERSHIP

### Adobe, Student Ambassador

08/2025 – Present

- Active participant in tech diversity community supporting underrepresented students through technical workshops

### AWS AI & ML Scholar, Amazon Web Services & Udacity

03/2025 – Present

- Selected as 1 of 2,000 students globally for prestigious AWS AI/ML Scholarship Program
- Completed "Introducing Generative AI with AWS" certification covering foundation models, AWS Bedrock, and responsible AI development, gained hands-on experience with AWS SageMaker for model training and deployment