

ANDREW TAYLOR

LinkedIn.com/in/andrew-lawrence-taylor · Github.com/ataylor370 · ataylor370@gatech.edu · 470.526.4459

EDUCATION

Georgia Institute of Technology

Atlanta, GA

Bachelor of Science in Computer Science - Systems Architecture and Intelligence

May 2027

- **GPA:** 3.64/4.00
- **Relevant coursework:** Machine Learning, Artificial Intelligence, Systems and Networks, Advanced Computer Organization, Design and Analysis of Algorithms
- **Professional Organizations:** Georgia Tech Black Student Computing Organization, Georgia Tech ColorStack, Georgia Tech Society of Black Engineers, Georgia Tech African Student Association, INROADS

EMPLOYMENT HISTORY

IBM

Lowell, MA

Software Developer Intern

May 2026 – Aug 2026

- Owned Model Access API from planning through production, enabling an internal background coding agent to securely access Azure OpenAI and AWS Bedrock.
- Built the request lifecycle behind the API, handling routing, authentication, authorization, and model resolution to enforce secure access on every call.
- Productionized gateway infrastructure through Helm, Terraform, and ALB ingress, integrating Microsoft Entra and AWS STS federation for secretless authentication.
- Co-owned coding-agent observability from planning through production, building tracing infrastructure that enabled reliable response evaluation, debugging, and end-to-end subagent execution analysis.

Amazon Web Services (AWS)

Herndon, VA

Technical Infrastructure Program Management Intern

Jun 2025 – Aug 2025

- Engineered PostgreSQL-driven ETL pipelines and QuickSight visualizations that uncovered 36,000+ optimal ML infrastructure expansion points.
- Executed data integrity audits, uncovering 1,000+ discrepancies across four validation categories and supporting the incident triage process to improve data reliability.
- Learned cloud infrastructure, networking, and security fundamentals while earning AWS Cloud Practitioner certification.

PROJECTS

Predictive Modeling for Urban Traffic

- Developed an XGBoost regression model to predict traffic throughput using roadway features, traffic patterns, and vehicle composition from Georgia DOT traffic data.
- Built a nested cross-validation pipeline using GridSearchCV, tuning 9 XGBoost hyperparameters and executing 2,304 model fits per outer validation fold.
- Achieved an R^2 of 0.86 on unseen data, outperforming Random Forest and multiple regularized linear regression baselines.

Money Parse

- Designed a full-stack web app for personal finance management, enabling users to track expenses, set goals, manage budgets, and receive AI-driven insights.
- Built the front end with Django templates, HTML, and CSS, delivering responsive interfaces for transactions, budgets, and goal tracking.
- Engineered a Django/Python back end with database models for transactions, goals, and budgets, and integrated the OpenAI API for AI-driven financial insights.

TECHNICAL SKILLS

Languages: Python, Java, TypeScript, JavaScript, Go, C, C++, SQL, CSS, HTML

Frameworks & Libraries: React, Django, Scikit-learn, XGBoost, Pandas, NumPy

Cloud & Infrastructure: AWS (EKS, IAM, Redshift, QuickSight), Kubernetes, Helm, Terraform, Docker

Developer Tools & Platforms: Vitest, OpenTelemetry, IBM Instana, Git, GitHub, Jira

Certification: AWS Certified Cloud Practitioner