

Abba Otieno Ndomo

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Data Analyst / Data Scientist Intern

Work Authorization: F-1 (CPT eligible) | OPT (May 2027) | STEM OPT eligible | No sponsorship required for internship (CPT)

Technical Skills

Languages: SQL (CTEs, Window Functions, Joins), Python (Pandas, Scikit-Learn), R, Bash
Tools & Ecosystem: Snowflake, Airflow, Git (Version Control), Tableau, Excel (VBA/Macros), dbt, VS Code
Analytics: A/B Testing, Experiment Design, KPI Definition, ETL Pipelines, Hypothesis Testing, Regression Analysis

Experience

- KPMG (Automation/NLP)**

Mumbai, India
Jun 2024 – Aug 2024

Software Engineering Intern (Data & Analytics Focus)

 - Manual audit QA processes were prone to human error and high latency.
 - Engineered a RAG-based NLP pipeline using Python and SQL to automate document verification; optimized data retrieval with advanced SQL indexing.
 - Achieved 95% precision in automated audits and improved data pipeline test coverage by 40% using a scalable PyTest suite.
- GT Investment Committee**

Atlanta, GA
Jan 2025 – Present

Quantitative Analyst Mentee

 - Manual evaluation of ticker performance delayed rebalancing of a \$500K ETF portfolio.
 - Developed an automated equity screener in Python using `pandas` and `yfinance`; built regression models to identify alpha in undervalued assets.
 - Reduced manual research time by 60% and provided data-driven buy/hold recommendations adopted by the committee chair.

- GT Housing & Residence Life**

Atlanta, GA
Aug 2023 – Present

Housing Operations Data Assistant

 - Maintenance response times were inconsistent, impacting student satisfaction scores.
 - Querying 200+ records via SQL to identify bottleneck stages in the maintenance lifecycle; performed cohort analysis on ticket types.
 - Recommended 3 specific SLA improvements to management, leading to a 15% reduction in average response time.

Selected Projects

- Boxxer AI — ML-Powered Packing Assistant**

Jan 2024 – Present

React Native, Python (Flask), Knapsack Optimization, FastAPI, SHAP

 - Designed and deployed travel assistant app that solves 0/1 knapsack to optimize item recommendations within weight limits.
 - Trained ML model on 300+ user sessions; implemented SHAP analysis to rank user-specific packing priorities.
- Loan Default Predictor (End-to-End Analytics Case Study)**

Independent Project
Nov 2024 – Dec 2024

SQL, Python, XGBoost, SHAP

 - Needed to identify high-risk borrowers to minimize financial loss for a synthetic lending dataset.
 - Executed complex ETL using SQL (CTEs, Null handling) to clean raw data; trained an XGBoost classifier and applied SHAP for model interpretability.
 - Delivered a model with 94.4% AUC and a summary memo for "stakeholders" explaining the top 3 risk drivers (Debt-to-Income, Credit Score, History).

- Queueing Analysis of Hemphill Intersection — QPLEX, Python, Data Analysis**

Dec 2024

ISYE 3232, Georgia Tech

 - Parsed 600+ vehicle events from intersection video footage to calculate interarrival, waiting, and service times.
 - Modelled as M/M/1 queue; used QPLEX to simulate pedestrian disruption impact, showing 17.4% increase in average wait.

Education

- Georgia Institute of Technology**

Atlanta, GA
Aug 2023 – May 2027

BS, Industrial & Systems Engineering; Minor in Mathematics

 - Relevant Coursework: Probability & Statistics, Linear Algebra, Optimization, Data Engineering Operations.

Awards and Honors

Dean's List @ Georgia Institute of Technology
Peer Inspiration Award @ Georgia Tech ISyE Center for Academic Success
Third Place – OKSEF International Engineering Fair (Chemical Eng. Category)

Leadership & Engagement

- Chair – DEI Committee, ISyE Department**

Atlanta, GA
2023 – 2024

Analytics Working Group Lead

 - Analyzed climate survey data from 500+ respondents; synthesized key insights into a visual dashboard presented to department heads.
 - Drafted an action plan addressing top student concerns; recommendations were officially adopted into the FY24 program strategy.