James E. Sweat III

github.com/JamesSweatIII linkedin.com/jamessweat james-sweat.com

EDUCATION

University of Virginia (UVA) School of Arts and Sciences - Charlottesville, VA

BA in Computer Science with a minor in Data Science, May 2025

Warwick High School (WHS) International Baccalaureate Program - Newport News, VA

International Baccalaureate Diploma, June 2020

SKILLS/LANGUAGES

- Programming Languages & Databases: Python, Java, C, C++, JavaScript, SQL, MongoDB, Neo4j, MySQL, PostgreSQL, SQLite
- Data Science & Machine Learning: Pandas, NumPy, TensorFlow, PyTorch, Scikit-learn, Matplotlib, Seaborn
- Cloud, DevOps & Tools: AWS (S3, Lambda, Redshift), Azure, Docker, Auth0, JIRA, Linux, Git, GitHub, Postman
- Automation & Web Technologies: BeautifulSoup, Selenium, REST APIs, Streamlit, Excel, HTML, CSS

TECHNICAL PROJECTS

Dorm Graph and Time Series System

Spring 2025

- Architected a Python system combining Neo4j graph data and MongoDB time series data for IoT-based dormitory monitoring.
- Built modular utilities for graph ingestion, synthetic data generation, and real-time sensor data retrieval.
- Integrated LLM-powered interfaces to enable natural language queries across graph and time series data sources.
- Delivered scalable, extensible system architecture supporting future data pipeline and analytics expansion.

Glassdoor Reviews Chatbot Project

Spring 2025

- Developed an Al-powered chatbot that summarizes workplace culture insights from Glassdoor employee reviews.
- Applied Python, MongoDB, and LLM-generated embeddings for clustering and semantic analysis of review data.
- Automated pipelines for processing unstructured text and returning real-time cultural summaries via API.
- Built scalable natural language query functionality enabling interactive access to organizational insights.

ETL Pipeline

Fall 2025

- Designed and deployed a scalable ETL pipeline integrating MongoDB, MySQL, and file system data for unified analytics.
- Automated extraction, transformation, and loading workflows using Python and SQL to reduce processing time by 30%.
- Implemented real-time data synchronization between databases to ensure consistency and integrity across platforms.
- Optimized data pipelines to improve query performance and enable faster business intelligence reporting.

WORK EXPERIENCE

Marriott Data Analyst

May 2024 – August 2024

- Provided data analysis services for Marriott, a global leader in hospitality, driving strategic insights and improvements.
- Created interactive dashboards in Tableau to monitor key operational metrics and guest satisfaction trends.
- Developed Python scripts using Pandas and matplotlib to track performance trends, revenue, and customer behaviors.
- Generated actionable insights that enhanced business strategies and improved overall operational efficiency.

SuccessKPI Associate Analytics Consultant

Summer 2023

- Conducted a speech study using SuccessKPI platform to improve natural language processing of customer interactions.
- Implemented customer-focused AWS Lambda functions for data cleaning, enhancing analysis within SuccessKPI software.
- Utilized AWS S3 for data storage, simplifying data access and retrieval for our customers in the SuccessKPI platform.
- Designed Python and SQL scripts optimized for AWS Lambda functions for data processing tasks within the SuccessKPI platform.

Hilton Customer Experience Data Analyst

May 2022 – August 2022

- Integrated data-driven performance metrics and predictive analytics to identify market trends and optimize resource allocation.
- Analyzed guest feedback to uncover usability issues and inform the design of targeted digital experience improvements.
- Collaborated with cross-functional teams to streamline workflows and enhance internal communication.
- Optimized reservation management and guest data tracking using internal hotel software.