

BRANDON M MAHACHI

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EDUCATION

Yeshiva University, Katz School of Science and Health Master of Science in Data Analytics and Visualization, GPA : 3.6	New York, NY Expected May 2027
University of Zimbabwe Bachelor of Science Honours Degree in Financial Mathematics, GPA: 3.5	Harare, Zimbabwe September 2024

PROFESSIONAL EXPERIENCE

Junior Financial Analyst Intern, FBC Holdings, Harare, Zimbabwe	August 2023 - July 2025
- Supported investment and planning decisions by building financial models and forecasting scenarios that improved projection accuracy by 15–20% across quarterly reviews. - Analyzed 3+ years of historical financial data to identify revenue patterns and cost-saving opportunities, contributing to a 10% reduction in operational variances. - Leveraged Excel and Tableau tools to build interactive dashboards, ensuring complex financial metrics were communicated clearly to stakeholders. - Cleaned and standardized large customer datasets (over 50,000 records) by resolving duplicates, inconsistent formats, and missing values, improving data quality for reporting and system uploads.	

ACADEMIC PROJECTS Fall 2025

Data Modeling & Database Systems Project
- Designed and implemented a full end-to-end Disease Data Management solution, including an enhanced ER model with 8+ entities, a complete data dictionary, and a fully normalized PostgreSQL OLTP database with referential integrity. - Built and populated the database with realistic data, executed operational queries, and demonstrated business rule behavior through DML operations. - Populated the database with 1,000+ rows of realistic synthetic data and executed 20+ operational SQL queries to validate business logic, constraints, and DML behavior across core tables. - Developed a dimensional data warehouse using Kimball techniques, creating 4 fact tables and 8 dimension tables, and engineered ETL/ELT pipelines that processed 50,000+ records to deliver BI-ready analytical structures for advanced reporting.

API Project: Data Retrieval and Storage with Redis and MongoDB
- Designed and implemented a RESTful API to retrieve, cache, and store structured data using Redis and MongoDB. - Built scalable data models and optimized query performance to support fast, reliable data access. - Integrated Python and Node.js to enhance backend functionality and streamline data processing workflows. - Improved data retrieval speed and reduced server load through efficient caching strategies.

NYC Government Payroll Visualization & Reporting Project
- Analyzed payroll data for 2.3M+ employees, identifying that 72% earn between \$0–\$100K. - Highlighted \$109B+ payroll concentration in Manhattan to support equity analysis. - Identified 723K inactive or seasonal employees affecting workforce costs. - Evaluated agency spending and flagged high overtime usage in Police & Fire departments. - Tracked payroll growth from 2018–2025, revealing significant spikes in 2024–2025. - Analyzed payroll data for 2.3M+ employees, identifying that 72% earn between \$0–\$100K.

SKILLS AND CERTIFICATIONS

Programming Languages: Python, R, SQL
BI: Tableau.
Statistical Tools: SPSS, Stata, Excel

LEADERSHIP EXPERIENCE

Financial Mathematics Program, UZ	August 2020 – September 2024
- Elected Class Representative for the Financial Mathematics program, serving as the primary liaison between faculty and a cohort of students. - Represented the class in departmental meetings, contributing to discussions on curriculum, scheduling, and student needs.	