

Quantitative developer with experience in building data-intensive applications and solutions in a financial services and asset management setting. Proficient in data analysis, visualization, and mining, statistical methods, financial modeling, investment management, and quantitative analysis.

Education

Artificial Intelligence Graduate Certificate	2024
Johns Hopkins University	
Master of Science in Computational Finance and Risk Management	2021
University of Washington	
Master of Science in Economics	2015
Florida Atlantic University	
Bachelor of Science in Business Economics and Finance	2013
University of Central Florida	

Professional Experience

Citi

Miami, Florida

- Senior Vice President/ Optimized Analytics - Global Investment Lab 2022-Current
- Architected a Python-based onboarding framework that migrated portfolio-analytics models from end-user Excel to production, eliminating 90 % of manual effort and shrinking refresh latency from hours to minutes for 60 analysts supporting Citi Private Bank's global portfolios.
 - Re-engineered Outlook Watchlist in Python/SQL, automating thematic-exposure analytics and expanding adoption business-wide while cutting refresh latency from overnight to hourly. Winner, 2024 Global Private Banking Innovation Award.
 - Applied Python/SQL data-mining to sift portfolio-holdings data, surface thematic exposures, and deliver ad-hoc, data-driven briefs that informed CIO asset-allocation decisions across Citi Wealth..

Santander Private Banking International (SPBI)

Miami, Florida

- Senior Data Analytics Consultant
- 2019 - 2022
- Led the end-to-end build of a Tableau–Python/SQL analytics platform (migrated from static weekly PDFs), accelerating report delivery 5× (weekly batch → daily refresh) and adding new KPIs and drill-downs, powering insight for 180 private bankers and 50 advisors.
 - Built 20 + Tableau dashboards spanning CEO, commercial-management, investment, and operations lines, surfacing first-ever visibility into transactions, net-new-asset growth, platform flows, and client-onboarding KPIs and eliminating ad-hoc data pulls (Python/SQL ETL).
 - Built and operated Python/SQL data pipelines for investments, commercial management, and business intelligence, applying data analyses and statistical methods to uncover patterns and trends, leading to a data driven implementation of strategy and decision making.

Investment Advisor

2017 – 2019

- Advised Premier clients (\$2-5 M) with a systematic advisory (data driven) approach, coordinating 28 RMs and servicing 2 000+ portfolios, across the Banking & Investment Services and Fund Wrap programs. Rated as top advisor among my peers by the bankers I served.

Product Analyst

2014 - 2017

- Designed and developed database systems to identify investment opportunities for over 10,000 clients and 23Bn in AuM across Banking & Investment Services and Fund Wrap programs.
- Analyzed and managed model portfolio analytics for Fund Wrap and asset allocation committees, focusing on performance attribution.

Technical Skills

- Languages & Libraries:** Python (pandas, NumPy, scikit-learn, TensorFlow), R (quantmod, quantstrat, portfolioanalytics), SQL (Oracle, PostgreSQL, MS SQL), Bash.
- Data Engineering:** Apache Impala, AWS S3, Airflow, Git/Bitbucket.
- BI & Viz:** Tableau, Qlik, Matplotlib, Seaborn.

Financial Skills

- Asset allocation and portfolio analytics.
- Portfolio construction and optimization.
- Financial and risk modeling.
- Investment management.

Highlighted projects

- [A framework for predicting energy prices using technical analysis and parametric machine learning models.](#)
- [Does it pay to buy ethically? A study of KLD criteria during the previous decade.](#)

Awards and recognitions

- 2024 Global Private Banking Innovation Award: Best Product Innovation for Outlook Watchlist.
- 2021 SPBI's Key Talent Development Program.
- 2018 Santander's Young Leaders of Tomorrow Program.
- 2017 SPBI's Talent & Excellence Program: First Place.
- 2013 Economic Scholars Program, Federal Reserve Bank of Dallas.
- 2013 UCF Showcase of Undergraduate Research Excellence: Second Place (Social Sciences).
- 2013 UCF's Honors in the Major Scholarship.

Previous Experience

- Santander Private Banking International Strategy Analyst (2013 - 2014).
- Florida Atlantic University Graduate teaching assistant (2013 - 2014).