I build robust data analytics infrastructure that serves as the backbone for data-driven decision making within organizations. My experience spans across the development of interactive BI dashboards, ML-based monitoring systems, Python ETL infrastructure, and the containerization of Linux servers to host SQL and NoSQL databases.

PROFESSIONAL SUMMARY

- Shaping fraud strategy at an NYDFS-regulated digital assets exchange through the development of mission-critical dashboards and Python/SOL based fraud detection tools that have reduced monthly fiat fraud losses by over 70% and prevented over \$15 million in losses to the company and its customers.
- Ideated and built ETL infrastructure in Python to ingest on-chain data and leverage it to proactively identify and restrict scam victims - preventing over \$10M in customer losses to scams.
- Conducted statistical/ML analyses in DataBricks and created Looker/PowerBI dashboards on top of Azure, AWS, and Hybrid cloud environments to help C-Suite executives and managers better navigate their data and improve decision making in sales, manufacturing, customer support, expansion, and fraud.

PERSONAL PROJECTS

- Built a Crypto-Tax software in Python that reconciles and visualizes transactions, assets, fees, and notional USD earnings across 8 blockchains for a list of supplied exchange accounts and wallet addresses.
- Developed a full-stack web application to track productivity and visualize the trends in real-time on mobile and desktop devices. Spun up and connected Ubuntu servers to the internet via domains and proxy managers, then used them to host dockerized environments for the React JS frontend, Python Flask backend, and SQL server.
- Familiar with Solidity programming and Ethereum smart contracts with beginner-level deployments on testnets.

EXPERIENCE

Gemini, NYDFS Regulated Digital Assets Exchange Greater NYC Area

July 2021 – Present

Senior Data Scientist \rightarrow Staff Data Scientist

- Built systems in Python to proactively identify and prevent ACH fraud, reducing loss rates from 1.5% to 0.3%.
- Structured disparate internal and external data sources to create organized datasets, and then used that data to create core Looker dashboards for transaction reconciliation, fraud restriction rate review, fraud customer review, CS ticket response metrics, scam victim detection, and ACH, card, and account compromise loss monitoring.
- Created mission critical tools and conducted analysis to: assess the marginal value, cost estimates, and fraud rates associated with products and external vendors, detect and plug a \$1M/year fraud loss vector, ingest on-chain data for fraud detection tools, detect market manipulation in real-time, and provide data for subpoenas and regulators.

Fabuwood, X-Lab Department, Manufacturing Company Greater NYC Area March 2020 – July 2021 Data Scientist

- Helped transform the company's approach to data-fueled decision making among department managers and C-Suite executives by creating some of the company's first dynamic dashboards for reviewing trends in critical KPIs within manufacturing, marketing, customer service, and sales.
- Implemented ETL pipelines in SQL / Python to structure data from Azure, Acumatica, and on-prem servers.

MichaelNatenzon.com Remote

Web App Developer

• Developed and deployed React / CMS websites with forum, registration, and front-end management features to help clients grow online engagement from zero to tens of thousands of page views. Implemented 11 successful web apps that reduced clients' expenses and created centralized digital spaces that grew community engagement.

EDUCATION

Johns Hopkins University – MBA / B.S. Materials Science and Engineering – Dual Degree Graduate Inductee of Beta Gamma Sigma - The Global Honor Society of AACSB-accredited Business Schools

2014 - 2019

January 2012 – Present

Python Libraries: SciKit-Learn • SciPy • Numpy • Pandas • Natural Language Tool Kit • RegEx • MatPlotLib • SQLAlchemy IBM Certificates: Python for Data Science • Machine Learning with Python • Big Data • Advanced SQL (LinkedIn)