

# Kori Vernon

## Technical Skills

**Languages** Python (Strong), C++ (Intermediate), SQL (Strong), Java (Intermediate), HTML/CSS (Previous Experience), Scala (Previous Experience).

## Experience

- November 2022– Present **Application Developer, Associate, Institutional Securities Technology (IST)**, Internal Trading and Reporting Applications (ITARA), Morgan Stanley.
  - Leveraged Python and SQL (DB2) to integrate back-end daily execution prediction algorithm (SARIMA) with UI. Created Data Quality Suggestion Engine to streamline process of creating rules with the assistance of analytics using Python and SQL.
  - Responsible for leveraging technologies to go from ideation to use case. Manage third party Data Quality Tool within the firm, and co-lead Racially and Ethnically Diverse Developers (RED Devs) affinity group within the firm.
- February 2022– November 2022 **Automated Risk Trading Production Engineer, Analyst, Reliability and Production Engineering (RPE)**, Automated Market Making (AMM), Morgan Stanley.
  - Reliability and Production Engineer providing DevOps support for the AMM Team during trading hours; created and implemented tooling, ready for business indicators, and enhanced existing infrastructure.
  - Implemented report aggregation tool and dashboard for AMM DevOps Engineers to easily: load in, view, query, export, and delete outdated data to expedite the process of solving and resolving issues quickly.
- June 2019– January 2022 **Teaching Assistant, Data Structures & Algorithms and Introduction to Programming**, New York University.
  - Assisted faculty and other instructional staff by performing teaching related duties, developing teaching materials, preparing exams, hosting office hours and labs, grading exams and homework.
  - Create resources and provide over 200 students every semester with information to grasp a stronger understanding of Data Structures and Algorithms and introduce students to programming and problem solving using Python.
- October 2021 **Full Stack Developer, Private Equity Connection**, New York.
  - Tasked with creating, a web-based Private Equity modeling application.
  - Utilized Python and Flask library to create a proof-of-concept web app for dynamically creating excel models.

## Projects

- April 2023– Present **Equities Monitor (EMon)**, *Personal Project*, Python.
  - Leveraging yfinance, Interactive Brokers, Robinhood, and E\*Trade API's to automate portfolio management through the use of equity options and stock. Implementing various volatility pricing techniques to find directional and neutral opportunities in the market, and actively manage personal portfolios with varying degrees of risk (Work in Progress).
- January 2022 **Tesla Fleet Management Application**, Python.
  - Web application using Flask and Tesla API to see important diagnostic information, lock, unlock, and remotely start vehicles to make the process of managing Tesla rental fleets easier.
- December 2021 **License Plate Character Classification**, *Partner*, Python.
  - Collected sample images of license plates and built license plate character classification models using Logistic Regression, Support Vector Machines, and Neural Networks.
  - Logistic Regression, and Support Vector Machine models yielded performance of 100% sample license plates.
- July 2020 **#BlackOwned**, *Partner*, React Native.
  - Application created to discover black owned businesses near users so they can take action and support Black Owned Businesses in their community.
  - Implemented map search feature to make user experience better.

## Education

- August 2018– December 2021 **New York University, Tandon School of Engineering**, B.S. Computer Science, Math Minor.
  - Relevant Coursework** Artificial Intelligence, Computer Systems Organization and Architecture (Verilog), Data Structures and Algorithms (Python, C++), Databases (SQL), Object Oriented Programming (C++), Machine Learning
- August 2016– May 2018 **Saint Augustine's University, 59 Credits**, Business and Biology Concentration.