

David Sanchez

davidsanchy22@gmail.com | davidsanchez.io | 706-461-9641 | Atlanta, GA | United States Citizen

GitHub: <https://github.com/davidsanchez222> | Handwriting Recognition Code: <https://bit.ly/handwritingcode>

EDUCATION

UNIVERSITY OF GEORGIA – Bachelor of Science in Computer Science – 2026

Cumulative GPA: 3.7 / 4.0

SKILLS

Programming Languages: Python • Kotlin • JavaScript • HTML • CSS

Big Data & Machine Learning: AI • Reinforcement Learning • pandas • NumPy • sci-kit learn • matplotlib • TensorFlow • PyTorch

Miscellaneous Technologies: Docker • Kubernetes • AWS • Statistics • Hypothesis testing • OOP • APIs • Django • Git

Language: English • Spanish

PROFESSIONAL EXPERIENCE

Fluence Energy

Atlanta, GA

Data Engineering Intern

June 2023 – September 2023

- Focused on analyzing why batteries degrade and extracting important data to explain it.
- Analyzed battery rack current data which resulted in finding that bottom racks on the battery cores had higher current.
- This analysis was important when feeding battery data into a machine learning algorithm.
- Created a **Python** wrapper for a **REST API** for battery storage centers which saved time when pulling data.
- Wrote a script to simultaneously send power commands to batteries and collect data on them.
- Assisted on another script that collected battery data via **Modbus** connections.

Singularity Capital

Atlanta, GA

Artificial Intelligence (AI) Intern

May 2022 – August 2022

- Utilized **Yahoo Finance** Python wrapper to access historical data on stock indices such as **SPY** and **QQQ**.
- Refactored a deep learning model trained on that historical data from **TensorFlow** to **PyTorch**
- The new **PyTorch** model saw an increase of 12% in accuracy when predicting stock prices.
- Developed script that track the starts and ends of bull and bear markets in the past and calculated max drawdown.
- Created a market scanner entry signal based on relative value for highly correlated equity pairs like HD and LOW.
- Extensively back tested models in parallel and avoided common data leakage problems found in financial time series datasets.

PROJECTS

NBA Betting

https://github.com/davidsanchez222/nba_bets

- Gathered and stored game and player data in **MySQL** database using NBA API endpoints.
- Cleaned data using built-in **pandas** methods and regular expressions to create a **DataFrame** used to train an **XGBoost** regression model.
- Used NBA data insights to create informed programs to calculate over/under odds to compare against bookmaker lines.
- Used web scraping library **BeautifulSoup** to get historical betting odds for NBA games used for back testing models.
- Aggregated and created various basketball statistics to use as predictive features in machine learning models.
- Accessed **Google Maps API** to calculate distances between NBA stadiums; used as an important feature in forecasting model.
- Used **scikit-learn** Python library to train machine learning algorithms such as **decision trees**, **k-means clustering** and **k-nearest neighbors**.
- Created script to retrieve the NBA games of the day and run the trained model to generate daily predictions.