# Sam Pomerantz

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**Personal Website:** https://sampomerantz.me

## **EDUCATION**

Boston University, School of Computing & Data Science

Bachelor of Arts in Computer Science

May 2023

GPA: 3.84/4.00

Boston University, Questrom School of Business

Bachelor of Science in Business Administration, concentration in Data Analytics

**Relevant Coursework:** Data Structures & Algorithms, Computer Systems, Software Engineering, Database Systems, Financial/Managerial Accounting, Financial Management, Information Systems, Computational Finance

## PROFESSIONAL EXPERIENCE

Amazon, Seattle, WA

*May 2022 – September 2022* 

Software Development Engineering Intern

- Automated the creation of three NoSQL databases storing pre-calculated information of Prime members via CloudFormation.
- Engineered backend infrastructure, APIs, data validation, and unit tests for the three DynamoDB regional databases in Java.
- Collaborated with the Prime Student team to integrate the APIs into two retail checkout locations (PIN and TryPrime).
- Managed project deliverables with Agile Development frameworks Kanban and Scrum to keep the team informed on progress.

## The LegalTech Fund, Boston, MA

November 2020 – September 2021

Software Engineering Intern

- Created a scalable database and management system on Amazon AWS, tracking 300+ potential investments for the fund.
- Deployed a Python program to detect, categorize, and push news alerts regarding 50+ select companies from the AWS system.
- Saved 20 hours a week of labor by automating the financing directory in Python, tracking rounds and funding information.

Apollo, New York, NY

*June 2020 – October 2020* 

Software Engineering Intern

- Implemented various webhooks and APIs in Java to import and analyze data from 100+ NASDAQ listed tickers using Quandl.
- Programmed reactive applications in Java to stream market data and perform interpretation to find opportunities in real-time.
- Analyzed large-scale historical stock data looking for patterns and developing indicators using Python, Pandas, Selenium, and Machine Learning (AutoGluon AI, TensorFlow ML). Improved run-time by more than 90% using a parallel systems approach.

## PROJECTS & LEADERSHIP

## Machine Learning Score Predictor, Desktop Application in Python

May 2022 – July 2022

- Applied AutoGluon's Natural Language Processing and TabularPredictor to train a model predicting sentiment score from text.
- Remodeled hyperparameters, evaluation metrics, data pre-processing, and stop words to improve model fitness to 84%.

#### MBTA iOS Tracker, Mobile Application in Swift

February 2022 – April 2022

- Developed a mobile application for Apple devices in Swift to easily track upcoming MBTA Trains at certain stations.
- Utilizes Google OAuth user authentication, Swift data persistence, and is compatible with mobile and tablet devices.

## Unusual Volume Detector, Web Application in Python and JavaScript

*July 2020 – December 2021* 

- Created a program in Python which retrieves historical data from 500+ NYSE stocks and detects significant volume variance.
- Produced a visualization website for the program in React receiving over 60,000 viewers per week upon launch and ranking #3 on Google Search. The website is automatically updated via a Raspberry Pi and available at https://unusualvolume.info/.

#### **Options Analyzer**, Desktop Application in Python

March 2020 - August 2020

- Constructed a series of programs in Python which display market and derivatives data as interactive 3D graphs and heat maps.
- Facilitates the understanding of derivative activity behind any given stock alongside helpful visualizations in under 10 seconds.

#### Boy Scouts of America, Wilmette, IL

September 2010 - July 2020

Eagle Scout, National High Honor Society Vice President, Senior Patrol Leader

- Developed weekly plans and activities for meetings, service projects, outreach events, and 500+ hours of community service.
- Spearheaded the planning, sourcing, construction, and upkeep of 250 feet of new trail in the Blue Star Memorial Forest.

## **TECHNICAL SKILLS**

**Programming**: Java, Python, Swift, C, JavaScript, HTML, CSS, VBA, Object-Oriented Programming, Data Structures **OS & Database**: SQL, NoSQL, DynamoDB, Amazon AWS, Windows, MacOS, Linux, Raspbian, VirtualBox, VMWare **Additional**: Git, JSON/XML, Excel, AutoCAD, Data Visualization, Project Management, Agile Development, System Design **GitHub**: https://github.com/sampom100/