

# ADAM J. LIEBERMAN

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## EDUCATION

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### GEORGIA INSTITUTE OF TECHNOLOGY

#### Masters in Computer Science

Specialization: Machine Learning

GPA: 4.00

Atlanta, Georgia

#### Bachelor of Science in Applied Mathematics

- Summa Cum Laude
- Faculty Honors and Dean's List

GPA: 3.68

## EXPERIENCE

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### Lucena Research

#### Quantitative Developer Intern

Atlanta, Georgia

January 2016- May 2016

- Developed a non-leveraged ETF trading algorithm in Python to find portfolios with maximum Sharpe Ratio with regards to constrained ETFs through optimization and stepwise regression. Currently live and up 7.27% YTD.
- Created functions to scan and fix data from providers such as NASDAQ.
- Researched and created equity scans on the QuantDesk platform to search for hidden alpha.

### Janus Capital Group

#### Quant & Equity Research Developer Intern

Denver, Colorado

May 2015- Aug 2015

- Worked with Myron Scholes and his asset allocation team to create a duration mapping for any Janus fund to discover securities exposure by country
- Designed python functions to scan credit default swaps data from multiple data providers and automatically upload it to the database
- Researched Copulas and their importance to Expected Shortfall (known as conditional value at risk or expected tail loss)
- Designed a windows application, python backend, that runs a historical weather simulation using a Gaussian Distribution against more than 4 million scraped weather data points. The program takes in a list of company locations and a function automatically extracts the latitude and longitude and generates a score report for each store as well as an overall score report and a heat map for visualization of store scores.
- Used HTML and CSS to create a web interface for the ResearchLive Twitter Scraper
- Created a windows application, python backend, that scrapes GlassDoor and generates visual insights such as moving averages, sentiment analysis (Bayesian Sentiment Analysis Algorithm) graphs, word clouds, and score reports for a given company.
- Used Excel to create a revenue build for Vanda Pharmaceuticals (VNDA)
- Held meetings with CEO and CFO from Sealed Air Corp (SEE) and DXPE Enterprises (DXPE) to gain further insight into operations relating to a possible major stock purchase

### Quantum Finance

#### Co-Founder

Atlanta, Georgia

Aug 2016 - Present

- A web application that helps average investors create smarter portfolios through optimization and machine learning with D3 interactive visualizations.
- Built the entire backend with python, utilizing the following libraries: pandas, numpy, scipy, requests, beautiful soup, among others.
- Built the entire front-end with HTML, CSS, Javascript, JQuery, and D3.
- Used the flask micro framework to bridge the back and front-end together.

### PENNYWHALE & CAPPIO

#### Co-Founder

Atlanta, Georgia

May 2014- 2016

- Co-Founded PennyWhale to provide intuitive access to financial data through natural English queries
- Co-Founded Cappio to create easy and intuitive data-driven analytics for financial research
- Created an advanced metric based algorithm using threshold-set levels and real time data to create continuously updating analyst reports
- Designed interactive financial statements to speed up fundamental analysis
- Held meetings with top wealth managers, hedge funds, and retail investors to gain insight into advanced financial tools and models, promote and sign up new PennyWhale and Cappio users, and to research new tools to create a more distinguished product
- 3,000 website hits and 50 account users in the first 5 days with over 50,000+ website hits and over 4500 account users in total
- Made front page of Hacker News and Product Hunt
- Team went through DreamIt incubator program in New York
- Cappio acquired by competitor Simply Wall St. (<https://simplywall.st>)

### GEORGIA TECH INVESTMENTS COMMITTEE

#### Director of Analytics & Quant Sector Analyst

Atlanta, Georgia

Sept 2012- Present

- Manage a \$1,200,000 fund and make executive decisions on equity and bond purchases
- Used python for portfolio analytics such as sharpe ratio, visualization of holdings data, and portfolio optimization
- Direct 11 sector analysts with 6-8 analysts each, 4 undergraduate computer scientists, and two quantitative computational finance graduate students

## SKILLS/INTERESTS

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**Skills:** Python, NumPy, SciPy, Pandas, Matlab, flask HTML, CSS, D3, GIMP, Excel, Latex, Gephi, Finance, Trading, Data Analysis