# Gunnar Balch

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## **OBJECTIVE**

I'm a recent computer science graduate with experience in finance, math, and data analysis. I'm looking for an entry-level position where I can leverage my experience in new areas, learn from industry experts, and contribute to projects with impact

#### **EDUCATION**

**University of Georgia**, School of Computing *Bachelor of Science, Computer Science* 

Athens, GA December 2024 GPA: 3.53

#### RELEVANT COURSEWORK

Software Engineering, Computational Investing, Computer Graphics, Computer Networks, Web Programming, Algorithms, Computer Architecture and Organization, Computational Theory

## **QUALIFICATIONS**

- Developed stock analysis software using WebScraping and Machine Learning strategies
- Software project management & development using React and Javascript Projects with MongoDB and SQL.
- Managed collaborative student software development projects
- Programming Languages: SQL, Python, C, C++, Java, Javascript, React, HTML, CSS
- Operating Systems: Windows, Linux, Unix
- Database: MySQL, MySQL Server, MongoDB
- Software: AutoCAD, Microsoft Excel, Tableau, SQL, Unity, Adobe(Photoshop, Primiere), Github

#### **WORK EXPERIENCE**

# **International Conference on AI in Finance (ICAIF).**

Webmaster

New York City, NY November 2024 - Present

- Oversee and maintain the ICAIF website, ensuring up-to-date and accurate content, and optimal functionality.
- Collaborate with conference organizers, presenters, and participants to ensure their information is present and accurate on the site.
- Act as primary point of contact for website-related inquiries, assisting in updates and troubleshooting issues.

## 5th ACM International Conference on AI in Finance (ICAIF'24).

New York City, NY November 2024

Lead Volunteer and Assistant Coordinator

- Assisted conference management with conference and event setup
- Managed conference registration, and check-in, ensuring a seamless process by verifying attendee registrations, managing badge distribution, and providing event materials.
- Coordinated and managed fellow volunteers, providing guidance on rworkflows and attendee support across multiple event locations.
- Contributed to event setup, including arranging signs, decorations, and areas for poster sessions where researchers and students presented their projects.
- Gained insight into novel applications of Artificial Intelligence and Machine Learning in finance, networking with influential professionals from organizations like JPMorgan, BlackRock, US Bank, NYU, CMU, and Emory University.

### Bennett's Market and Deli

Atlanta, GA

Chef and Cashier

January 2020 - March 2020

• Worked as a cashier, Chef, & Stocker

## Food Bank of Northeast Georgia

Atlanta, GA

Volunteer

September 2023 - December 2023

• Volunteered at the Athens food bank, helping organize and store food and other essentials.

### PROJECT EXPERIENCE

#### **Investment Management**

June 2020 - Present

- Successfully managed a personal stock portfolio, achieving over 300% growth since 2014, outperforming the S&P 500 (250% increase over the same period)
- Developed a strategy for market research, sentiment analysis, and risk assessment to optimize portfolio performance.
- Most profitable holdings include: AAPL, AMD, DAL, DIS, NVDA, SONY, and TSLA

### Portfolio Analyzer Software (Stocker)

November 2024 - Present

- A stock portfolio evaluator developed by myself.
- A python-based application for stock portfolio evaluation, combining financial metrics analysis and sentiment
  analysis, driven by an LLM. The project integrates multiple APIs to aggregate relevant and usable data and to
  provide actionable investment insights through both quantitative and qualitative assessments. Outputs CSV
  reports detailing risk metrics, sentiment, and GPT-generated evaluations.
- Developed using Python, OpenAI's GPT API, NewsAPI, YFinance, & TextBlob
- https://github.com/mosgus/Stocker

#### Market Simulator

October 2024 - Present

- A Market simulator developed by myself.
- Python-based market simulator that evaluates stock portfolios based on trade orders. Portfolio performance is simulated by calculating portfolio value based on user-provided orders and benchmarking ageists indices like SPX.
- Automated data retrieval and visualization using Pandas and Mathplotlib.
- https://github.com/mosgus/Market Simulator

# **Movie Booking Interface**

January 2024 - May 2024

- Served as Lead Programmer and Database Manager in a group of four
- Utilized the Agile project management framework, separating phases of the project into sprints, meeting with our project group's "client" after each development.
- Incorporated Javascript, HTML, and a MySQL database hosted on an external server( which I setup and paid for ) to create an interactive interface for customers and admins visiting the site.
- https://github.com/GunnarCMB/Movie-Booking-Project

#### **Image-Post Gallery Interface**

January 2024 - May 2024

- Worked as the Project Leader, Lead Programmer, and Database Manager in a group of 4
- Developed an Image Gallery interface where users can create accounts and login. Once logged users can "post" an image with a title and description which gets displayed on the homepage for all users and admins to view.
- Written in React and incorporated a MongoDB Database to host user and gallery data.
- https://github.com/Austin-Brock/4300-Final-Project

# ADDITIONAL EXPERIENCE

# Lanier Flight School

Gainesville, GA

Student Pilot

September 2024 - Today

- Flying 1-2 times a week, working towards earning a Private Pilots license
- $\sim$  12 hours flown with an instructor so far

#### HONORS AND AWARDS

University of Georgia Deans List
Peachtree Ridge High School Scholar Athlete Award
Peachtree Ridge High School Academic Letter
Advanced Placement Scholar: Completed 15 AP Courses

Every Semester 2021 - 2024

2017, 2018

2018

2019