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   Athens, GA
Bachelor of Science, Computer Science   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 with frontend and backend interactions.
- Managed local and cloud-based servers for database hosting and game server management.
- **Programming Languages**: SQL, Python, C, C++, Java, Javascript, React, HTML, CSS
- **Server Services:** AWS & OVHcloud
- **Operating Systems**: Windows, Linux, Unix
- **Database**: MySQL, MySQL Server, MongoDB
- **Software**: AutoCAD, Microsoft Excel, Tableau, SQL, Unity, Adobe(Photoshop, Primiere), Github

PROFESSIONAL EXPERIENCE

International Conference on AI in Finance (ICAIF)   New York City, NY
Webmaster   February 2025 - 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.
- https://ai-finance.org/

5th ACM International Conference on AI in Finance   New York City, NY
Lead Volunteer and Assistant Coordinator   November 2024
- 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 workflows and attendee support across multiple event locations.
- 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.

RESEARCH & PROJECT EXPERIENCE

Limit Order Clustering and Stock Price Movements - *UGA Research* — Athens, GA
Research Assistant — March 2025 - Present
- Working as a research assistant to replicate and analyze the findings of "*Limit Order Clustering and Stock Price Movements*" by Xiao Zhang of University of Maryland.
- Applying data analysis techniques, financial modeling, and statistical methods to test hypotheses and interpret results related to order clustering by retail investors.

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 Software — 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 "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
- ~12 hours flown with an instructor so far

UGA Economics Society — Athens, GA
Member — October 2022 - May 2024
- As a member of the Economics Society, I participated in academic research discussions, professional development workshops, and community-building events that deepened my understanding of economics while enhancing my marketable skills and connecting with peers and faculty.

HONORS AND AWARDS

University of Georgia Deans List — Both Semesters 2023
Advanced Placement Scholar: Completed 15 AP Courses — 2019