Chase S. Compton

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EDUCATION

The University of Alabama

Tuscaloosa, AL

Bachelor of Science in Computer Science | Bachelor of Arts in Mathematics

August 2021 - May 2025

• GPA: 4.0/4.0 | SAT: 1550/1600 | Awards/Honors: National Merit Scholar, U.S. Presidential Scholar Nominee

University College Dublin

Dublin, IE

Generative AI: Language Models, Markov Chains, The Mathematics of Google

January 2024 - May 2024

EXPERIENCE

Fetch *Backend Software Engineer Intern*

Birmingham, AL

May 2024 - August 2024

- Architected a scalable, microservice-based notification system using Go and AWS services (Lambda, MSK, EventBridge, ECS, DynamoDB), establishing a modular foundation for company-wide alerts
- Implemented event-driven architecture processing 100s of daily notifications for ~100 businesses, with RESTful API endpoints for retrieval and real-time alerts via Slack and internal tools, enhancing sales team efficiency and automated process visibility
- Led cross-functional collaboration to define notification types, utilized CI/CD practices, and delivered a comprehensive solution adaptable to future business requirements

DevClarity Birmingham, AL

Software Development Intern

July 2023 - May 2024

- Designed and implemented an LLM feedback loop and API test cases to ensure accuracy and quality over time
- Collaborated with startup leaders by contributing to the design and development of a Ruby on Rails application
- Engineered prompts to improve LLM progressive summarization output, leading to positive user feedback

Human Technology Interaction Lab

Tuscaloosa, AL

Research Intern

November 2022 - December 2023

- Radar-Enabled Human-Vehicle Interaction: Developed software using Python and ROS frameworks to control autonomous vehicles, simulating real-world human-vehicle interactions
- *Brain-Drone Race:* Utilized machine learning and EEG data from the Neurosity Crown to develop Python scripts for controlling and racing drones via brain activity (<u>DailyBeast Article</u>, <u>Mind Over Machine Video</u>)

PROJECTS

TurnOne | Typescript, Next.js, tRPC, PostgresSQL, Tailwind CSS, Clerk

• Engineered and deployed a full-stack, Formula 1 themed social media platform using modern web technologies, implementing user authentication, post sharing, and real-time updates

Junior Analyst GPT | Python, OpenAI API, AlphaVantage API

• Developed an AI-powered equity research assistant chatbot, integrating real-time financial data retrieval via API calls and document search capabilities using RAG

IMC Prosperity 2023 | Python, Pandas, NumPy

• Placed in the top 5% of an algorithmic and manual trading competition that simulated real-world markets by optimizing a trading algorithm that takes advantage of the bid-ask spread and using the log-adjusted Bellman-Ford algorithm to find the optimal trades during the manual challenge

Accuracy Analysis of Management Guidance | Python, Pandas, NumPy, BeautifulSoup, Benzinga API

• Analyzed management guidance for 2000+ public equities using financial APIs and web scraping techniques, comparing 10+ years of earnings guidance to actual revenues, segmented by time, industry, and market cap

SKILLS & INTERESTS

Languages: Go, Python, C, C++, JavaScript, Typescript, Ruby, HTML/CSS, SQL

Frameworks, Tools & Technologies: Git, AWS, Linux, SQL, Flask, React, Docker, Github Actions, Bitbucket Pipelines **Interests:** Formula 1, Mountain Biking, Chess, Soccer, College Football, WEC, Video Games, Movies