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   *May 2025*
- **GPA**: 4.0/4.0 | **SAT**: 1550/1600 | **Awards/Honors:** National Merit Scholar, U.S. Presidential Scholar Nominee

RELEVANT EXPERIENCE

DevClarity   **Birmingham, AL**
Software Engineer Intern & Research Intern   *July 2023 - Present*
- Contributing to early-stage product development and testing using the Ruby on Rails full-stack framework by refining and optimizing content generation strategies for DevClarity Pulse
- Collaborating with engineering and business leaders using a CI/CD development strategy
- Conducting comprehensive industry and company-specific research to provide strategic insights for the start-up

Human Technology Interaction Lab   **Tuscaloosa, AL**
Undergraduate Research Assistant   *November 2022 - Present*
- *Interactive Brain-Computer Interfaces:* Applying machine learning tools, such as TensorFlow, and real-time EEG data to develop interactive experiences for users to explore and engage with neuroscience
- *Radar-Enabled Human-Vehicle Interaction:* Writing software in Python and ROS to control autonomous vehicles to simulate real-world human-vehicle interactions in a safe environment
- *Brain-Drone Race:* Used machine learning software and EEG data from the Neurosity Crown to create Python scripts to control and race drones via a user's brain activity (DailyBeast Article, Mind Over Machine Video)

West Virginia Division of Natural Resources   **Charleston, WV**
Intern for the Deputy Chief of Administration   *May 2022 - August 2022*
- Developed, deployed, and maintained an invoice workflow software via Google Appsheets used by 35 state parks and ~200 employees that updates invoice status via email and allows users to monitor payment progress
- Created an internal site to streamline filesharing and resource locating via Google Sites

PERSONAL PROJECTS

TurnOne
- Designed and engineered a web application using a comprehensive tech stack (Next.js, TypeScript, TRPC, Prisma, Tailwind CSS, and Clerk) which enables users to share their Formula 1 opinions effortlessly

2048 Game & AI
- Built a recreation of the 2048 game using Python and Tkinter, enhanced with an AI powered by Monte Carlo Tree Search, achieving a greater than 30% win rate

IMC Prosperity 2023
- Placed in the top 5% of an algorithmic and manual trading competition that simulated real-world markets
- Optimized a trading algorithm that takes advantage of the bid-ask spread and used the log-adjusted Bellman-Ford algorithm to find the optimal trades during the manual challenge

Accuracy Analysis of Management Guidance
- Used the Benzinga API and a web scraper to gather 10+ years of guidance data from 2000+ public equities
- Processed the guidance along with the actual revenues with Pandas in order to analyze the accuracy of companies over time, industry, and market capitalization

External Aimbot for Counter-Strike: Global Offensive
- Developed a CS:GO external aimbot in C++, utilizing a memory class to extract and write essential data to the computer's memory, while applying mathematical calculations to determine precise aiming angles

SKILLS & INTERESTS

Skills: Python, C++, JavaScript/TypeScript, Ruby, SQL, React, Pandas, ROS, Linux, Git, HTML, CSS
Interests: Formula 1, Mountain Biking, Chess, Soccer, Video Games, Movies, TV, and Music