AINSLEY FREEDMAN

Columbus, OH (willing to relocate)

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Education

Emory University	**August 2023 – May 2027**
Bachelor of Science in Mathematics/Computer Science	*Atlanta, GA*

Relevant Coursework

Data Structures and Algorithms, Analysis of Algorithms, Computer Architecture/Machine Level Programming, Machine Learning, Computer Science Practicum, Discrete Math, Calculus I & II, Multivariable Calculus, Linear Algebra, Numerical Analysis, Mathematical Statistics I

Experience

CAV (Cognition and Visualization) Lab — **March 2025 – Present**
Undergraduate Research Assistant — *Atlanta, GA*

- Enhanced a D3.js visualization tool using JavaScript and D3.js, fostering dynamic manipulation of visual stimuli for behavioral experiments, thereby improving researcher efficiency and experiment accuracy.
- Engineered a client-side event logging framework with JavaScript to record and export structured interaction data, streamlining analysis workflows for research teams.
- Expanded the research platform's analysis capabilities by integrating behavioral tracking with custom front-end tools, which helped uncover differences in how users interpret different visual conditions.

PROJECT Emory — **September 2024 – Present**
Project Engineer — *Atlanta, GA*

- Collaborated in an Agile, cross-functional team of ∼8 to develop an HR dashboard for Odyssey Family Counseling, centralizing annual performance evaluations for 20+ employees and improving internal data accessibility.
- Implemented the performance evaluation form and optimized reviewer data display in Next.js and Tailwind, reducing manual effort per evaluation cycle by several hours and ensuring accurate, timely data flow.
- Contributed to sprint planning, code reviews, and iterative feature development, delivering reliable, user-friendly functionality across biweekly sprints while supporting a local Supabase development environment.

The Home Depot — **May 2025 – July 2025**
Software Engineer Intern — *Remote*

- Built and deployed a production-ready offline switch for POS systems in Java, simulating offline operation to allow testing without disconnecting network hardware, cutting register recovery time by 37.5% and eliminating the need for manual reboots.
- Created a real-time Grafana dashboard by integrating Prometheus metrics through Java backend services, enabling store leaders to proactively monitor register and store health.
- Conducted comprehensive testing of new Java-based POS features at the Marietta Technology Center and in a live store environment, validating performance and leading to successful deployment in over 2,200 stores in the U.S. and Canada.

Technical Projects

BranchingOutAI | *Next.js, Tailwind, JointJS, Supabase, Python, LangGraph, Vercel* — **November 2025 – Present**

- Built an interactive career path visualization with movable nodes, enabling users to explore 50+ roles and view dynamic trajectories, supporting informed career exploration.
- Implemented AI-powered recommendations using LangGraph and Python to highlight key skills and suggest personalized career paths, delivering actionable, data-driven guidance.

TrAIding Post | *Next.js, Tailwind, Supabase, Python, LangGraph, Vercel* — **September 2025 – December 2025**

- Developed a multi-agent trading platform front-end that translates complex agent insights into an intuitive interface, saving users several hours per trading decision by providing actionable recommendations without manual research.
- Enabled users to create and configure custom agents, increasing platform flexibility and streamlining strategy testing.
- Integrated LLM-powered APIs with Supabase to deliver personalized, interpretable trading recommendations, improving decision-making speed and confidence.

Analyzing Antisemitism: Insights with ML | *Matplotlib, pandas, scikit-learn* — **January 2025 – February 2025**

- Cleaned, modeled, and analyzed antisemitism-related datasets (∼2,000 entries) using pandas and scikit-learn, identifying trends and predictive patterns to inform advocacy strategies.
- Produced visual analytics with Matplotlib to deliver actionable insights to the American Jewish Committee, supporting data-driven community engagement and policy recommendations.

Core Competencies and Technical Skills

Languages: Python, Java, JavaScript, TypeScript, SQL, C, R, HTML, CSS
Web Development: React, Angular, jQuery, Tailwind, Bootstrap, Figma
Data/AI/ML: pandas, scikit-learn, PyTorch, LangChain, LangGraph, Matplotlib, MATLAB
Tools/Platforms: Git, Docker, REST APIs, FastAPI, Supabase, Vercel, Jira, Excel, Power BI, Tableau
Core Competencies: Full-Stack Development, SDLC, Agile Methodology, Problem Solving, Team Collaboration, Communication, Leadership, Customer-Focused Solutions, Prompt Engineering, Time Management, Organization

Leadership and Community Engagement

Girls Who Code — **September 2024 – Present**
Risk/Event Manager, Instructor — *Atlanta, GA*

- Led weekly coding classes for ∼20 girls, designing interactive lessons that built programming skills and fostered curiosity in computer science.
- Mentored students to develop problem-solving confidence and independent coding abilities, empowering them to complete projects and explore creative solutions.