
EDUCATION

Berkeley, CA

University of California, Berkeley

Planned Graduation: May 2027

- B.A. Economics and Data Science, Minor in Computer Science
- Completed advanced training in Economics, Data Science, and Computer Science at a level most peers won't reach until graduate school, including Data Structures, Econometrics, Probability, and Statistical Modeling. Planned: Artificial Intelligence, Game Theory, and additional upper-division CS/Data Science electives.
- Research: Designed ML-based trading systems that rival hedge-fund infrastructure, forecasting returns, modeling factors, and optimizing portfolios across market and alternative data.
- Clubs: Active in Berkeley Computer Science Association (CSA) and Undergraduate Economics Association (UEA), applying theory at a professional level.

EXPERIENCE

Intern

necoTECH - Sustainable Materials Venture

May 2023 - September 2023

- Automated federal contract discovery with Python/Pandas, cutting 200+ staff hours and \$5,000 in annual costs — producing a return far greater than the cost of the internship itself.
- Partnered with executives to convert 1,000+ raw leads into a ranked pipeline, presenting findings in strategy sessions that influenced key launch decisions.

Web developer

January 2024 - Present

- Built high-performance websites with Next.js and Supabase, integrating market APIs and advanced data visualizations. Tripled client traffic (200–300% growth) — an outcome most startups fail to achieve even with entire web teams.
- Led client engagement from design to deployment, proving I can own the full product lifecycle while driving measurable business impact.

Gallery Attendant

BAMPFA, UC Berkeley

Aug 2024 – Nov 2024

- Entrusted with safeguarding high-value artwork and visitor safety in one of Berkeley's most prestigious museums.
- Provided frontline operational support, ensuring a professional environment and seamless guest experience.

ACADEMIC PROJECTS

- **COMPSCI 61B** Engineered advanced data structures and graph algorithms in Java that outperform typical coursework, directly applied to high-frequency trading system design and order-book management.
- **Online courses** Went far beyond classroom learning — mastered Python, backend systems, and data structures, while self-directing into stochastic processes, numerical optimization, and quantitative finance at a professional level.

INDEPENDENT PROJECTS

- **Quantitative Trading** Engineered a breakout pattern analysis tool with Next.js and TypeScript (trade.evwillow.com) that processed and analyzed 100,000+ samples across multiple timeframes. Applied reinforcement learning to outperform benchmarks, delivering 40%+ simulated returns on 20 years of backtests — performance rivaling hedge-fund quant systems. Led peer collaboration on GitHub, mentoring teammates on code standards and coordinating reviews that improved reliability and taught others industry-grade practices.
- **Quantitative Risk Analysis** Built an LSTM-based stock prediction model that integrated Value-at-Risk (VaR) and volatility metrics on a 10,000-stock dataset, pushing risk modeling beyond what most undergraduates attempt. Engineered advanced technical indicators and stress-testing tools with Wharton Research Data Services data, producing

professional-grade risk-adjusted scanners. Published full pipeline and documentation to GitHub to set a standard for peer projects.

- **Productivity Optimization Tool** Designed and deployed a Java + Google Sheets + Google Calendar tool that increased efficiency by ~20% through automated ranking and task prioritization. Shared with peers, who immediately adopted it to optimize workflows — proving I design solutions that become benchmarks for others.

TECHNICAL SKILLS

- **Expert:** Python, JavaScript, SQL, C++, Next.js, Node.js, React, Tailwind, Git/GitHub — tools I've already used to outperform industry standards.
- **Advanced in Data/ML:** Pandas, NumPy, Matplotlib, Seaborn, JUnit, optimization libraries, machine learning, and data analysis — applied at a professional scale.
- **Working knowledge:** Docker, Linux, Scipy — continuously integrating into projects far beyond classroom scope.

LEADERSHIP & ACTIVITIES

Founder and President	Student Climate Action Team	January 2023 - August 2024
------------------------------	------------------------------------	-----------------------------------

- Founded and scaled a 15-member organization, motivating ~10 active volunteers and mobilizing 50–100+ participants per event — fostering teamwork, consensus, and community engagement that drove measurable action.
- Forged partnerships with NGOs, city council, and university groups to launch a renewable program cutting household CO₂ emissions ~10% across 10,000 homes (~70k tons over 10 years).
- Built and managed the team's website, centralizing resources and expanding outreach to sustain engagement.
- Recognized by city council, NGOs, and local media; invited to present projects that influenced renewable energy policy.

Eagle Scout	October 2023
--------------------	---------------------

- Directed 50 volunteers over 5 months to construct a 20-acre environmental education park with 2 miles of trails.

Public Initiative Attempt – City Green Belt Project	2022
--	-------------

- Attempted to secure a citywide “green belt” — failed publicly, but used the experience to develop persistence, expand community networks, and later succeed in sustainability partnerships.

Berkeley Computer Science Association (CSA)	Summer 2025 - Present
--	------------------------------

- Active in weekly technical workshops, collaborating with peers and engaging with industry speakers.

Undergraduate Economics Association (UEA)	Summer 2025 - Present
--	------------------------------

- Contribute to applied economics research projects and weekly discussions at near graduate-level rigor.

LANGUAGES

- **English** Native proficiency.
- **Spanish** Near-fluent in speaking, reading, and writing through school and immersion
- **Chinese** Conversational; actively expanding fluency for professional application
- **Technical Languages:** Python, JavaScript, SQL, C++ — applied in production-grade systems

INTERESTS / DECLARATION

- **Interests:** Technology, finance, AI, climate, entrepreneurship, and data — not as hobbies, but as domains I've already began shaping.
- **Declaration:** I am building a career at the intersection of AI, finance, and sustainability, leveraging data-driven methods to create scalable solutions with global impact.