Zachary Brandt

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Education

B.A. University of California, Berkeley   Berkeley, CA
Economics, Computer Science   Aug 2023 – June 2027
- GPA: 3.9/4.0
- Awards: Dean's Honors List – College of Letters & Science

Experience

Stanford, Deptartment of Economics   Palo Alto, CA
Research Assistant   Feb 2024 – Aug 2024
- Conducted econometric analysis and reserach on cross-sector firm market power
- Led data wrangling, EDA, and visualization on national employment datasets
- Contributed insights to burgeoning literature on industrial organization

Blockchain at Berkeley   Berkeley, CA
Project Manager   Sept 2023 – present
- Led teams in developing solutions for blockchain-native firms and others like FIFA
- Oversaw project management, deliverables, and communication us and our clients
- Built prize-winning applications and industry networking at global hackathons

ΑΓΩ, Beta Chapter   Berkeley, CA
Vice President   Aug 2024 – present
- Resurrected chapter from just two active members to 18 living in house
- Budget and manage over $70,000 in expenses, deposits, and savings per semester

Projects

Machine Learning   Nov 2025
Neural networks in RISC-V assembly code to classify digits, language
- Implemented non-linear activation functions and matrix multiplication in assembly
- Optimized convolutional networks via SIMD and multi-threaded parallelization in C

Computer Architecture   Nov 2025
Built a piplined CPU that supports RISC-V instructions
- Designed ALU, RegFile, and Immediates in Logisim for executing instructions
- Pipelined datapath into multiple stages while handling control and data hazards

Reinforcement Learning   Oct 2025
Implemented value iteration and Q-learning agents with robot controller
- Created an MDP and feature extractor for testing agents in learning environments

Skills

Programming: C/C++, Linux, MATLAB, Python, Java, JavaScript, R, RISC-V, Scheme, Solidity, SQL

Mathematics: Optimization, discrete, probability, linear algebra, differential equations, multivariable, statistics

Languages: English, German (C2 proficiency certified), Ancient Greek