

Jared Narvaez

www.linkedin.com/in/jarednarvaez | jarednarvaez@gmail.com | github.com/jar-narvz | (818) 294-3474 | Berkeley, CA

EDUCATION

University of California, Berkeley

Expected Graduation: **May 2027**

Bachelor's Degree in Computer Science; Minor in Data Science

Relevant Coursework: Structure & Interpretation of Computer Programs (Python, SQL), Data Structures (Java), Great Ideas of Computer Architecture (Machine Structures), Foundations of Data Science, Principles and Techniques of Data Science, Computer Security, Introduction to the Internet: Architecture and Protocols, Introduction to Artificial Intelligence

SKILLS

Languages: Python, Go, Java, C, SQL, JavaScript, HTML/CSS, Assembly (RISC-V)

Frameworks & Tools: React, Git/GitHub, Node.js, NumPy, Pandas, Matplotlib, Jupyter, VS Code, IntelliJ, Wireshark

Concepts: Cryptographic Systems Design, Transport Protocols, TCP, Reinforcement Learning, MDPs, Q-Learning

PROJECTS

Secure File Storage & Sharing System (Go)

Fall 2025

University of California, Berkeley

- Designed and built a secure cloud file storage system in Go, using Argon2 key derivation, AES-CTR encryption, and HMAC-based integrity verification to protect user credentials and file contents against malicious server operators and unauthorized access.
- Engineered an append-efficient linked-list storage architecture with per-chunk encryption, achieving O(new data) bandwidth on appends; file keys distributed via RSA public-key encryption and authenticated with digital signatures.
- Implemented invitation-based file sharing with transitive access and secure revocation, re-encrypting content under fresh keys and recursively propagating updates across a sharing tree; supported multi-device sessions with a fully stateless client.

Reinforcement Learning Agent Suite (Python)

Spring 2026

University of California, Berkeley

- Implemented batch value iteration for Gridworld MDPs, computing optimal policies, Q-values, and state values; tuned discount, noise, and living reward to produce targeted risk/reward tradeoff policies.
- Built a tabular Q-learning agent with epsilon-greedy exploration that learned optimal behavior for Gridworld and a simulated crawler robot through trial-and-error interaction.
- Developed an approximate Q-learning agent using linear function approximation over state-action features, enabling generalization across large state spaces and training Pacman to win on medium/large grids with only 50 training episodes.

Reliable Transport Protocol (TCP) (Python)

Spring 2026

University of California, Berkeley

- Implemented a subset of TCP with a full connection state machine (11 states), including three-way handshake, bidirectional data transfer, and graceful shutdown via both active and passive close procedures.
- Built reliable in-order delivery over an unreliable channel using a receive queue for out-of-order packets, sliding window flow control with advertised window updates, and sequence number wraparound handling.
- Engineered a retransmission system with a retransmit queue and adaptive timeout, estimating RTT via RFC 6298's exponential moving average algorithm and dynamically adjusting RTO to achieve within 5-10% of true RTT under varying link latencies.

EXPERIENCE

PhysaFlow

San Francisco, CA (Remote)

Multi-Agent Systems & Agentic Product Engineer Intern

October 2026 - Present

- Ramping up on a startup's multi-agent product codebase, studying agent architecture, orchestration, and tool integration ahead of contributing to agentic product features.

UC Berkeley, Visiting Scholar & Postdoc Affairs (VSPA)

Berkeley, CA

Data Assistant

June 2026 - Present

- Built automated reporting and validation workflows over 2,000+ records, replacing manual data handling with reusable spreadsheet logic and integrity checks.
- Maintain the department's live UC Berkeley website, transforming institutional datasets into published dashboards and visualizations across 3 scholar populations.

Pilipinx Association of Scientists, Architects & Engineers (PASAE)

Berkeley, CA

Core 38, 39 Vice President of External Relations

May 2025 - Present

- Led semester recruitment pipeline (tabling, info sessions, kickoffs) and co-organized UC Berkeley career fairs hosting 90+ employers and 2,000+ students; secured speakers and sponsors for flagship events.
- Managed and mentored External Reps and interns; ran weekly standups, scoped workstreams, created onboarding playbooks, and served as a career resource for 60+ active members.

Core 37 Computer Science Representative and Webmaster

May 2024 - May 2025

- Spearheaded two semester-long technical projects with a team of 3 interns, guided members through building personal portfolio websites in React.js and introduced game development fundamentals using Unreal Engine 5, providing hands-on mentorship throughout.
- Maintained PASAE's public-facing website, streamlining student access to resources, events, and networking tools.