

ETHAN LUNG

ethanlung@berkeley.edu | (908) 800-4484 | linkedin.com/in/ethan-lung/ | github.com/BassyEthan

EDUCATION

University of California, Berkeley

Berkeley, CA

B.S., Electrical Engineering and Computer Science (EECS), GPA: 3.54

May 2028

- **Relevant Coursework:** Data Structures and Algorithms, Computer Programs, Linear Algebra, Signals and Systems
- **Awards:** Special Congressional Recognition (Rep. Kean); Congressional App Challenge; PBS and NJ.com Featured Project

PROFESSIONAL EXPERIENCE

Amazon

New York, NY

Software Development Engineer Intern

June 2026 - August 2026

- Shipped the CAN Network Visualizer, an internal service snapshotting Amazon's cloud network across 300+ accounts, 8 regions, and both PROD/CORP fabrics, replacing hand-assembly of connectivity paths across dozens of consoles
- Assumed read-only IAM roles from a Java 21 Lambda to fetch transit gateways, route tables, VPCs, and endpoints into one DynamoDB graph, fail-closing on unreachable account families so operators never act on a partial snapshot
- Exposed GetTopology and TraceRoute as Smithy APIs to a web visualizer and an MCP server on Amazon's agent registry; TraceRoute replays longest-prefix-match forwarding over 600+ route tables, flagging delivered, blackholed, or no-route hops
- Cut connectivity triage from 20+ minutes of manual console work to a single sub-2s API query, refreshing all 16 region/fabric scopes every 30 minutes at 99%+ collection success

Jirav (Series B Startup)

Berkeley, CA

Software Engineer, AI Systems (contract)

January 2026 - May 2026

- Built an AI analyst interface for Jirav's FP&A platform that answers plain-English questions about budgets, runway, and close from live financial data, replacing manual report-pulling for CFO, FP&A, and ops users
- Structured the server (Python, Anthropic SDK) in 3 layers over Jirav's read-only API, with a bootstrap stage pre-loading workspace context, 9 typed tools handling retrieval, and deterministic calculators running every arithmetic operation
- Eliminated an ID-resolution retry loop that was the agent's most common failure mode, cutting tool calls per query from 7 to 3 across 4 end-to-end workflows; validated by 4 finance pros at J.P. Morgan, BCG, and EY

Nue.io (Series A Startup)

San Mateo, CA

LLM and Software Engineer (contract)

September 2025 - January 2026

- Developed a system that turns plain-English pricing requirements into validated, deployed JavaScript plugins for Salesforce CPQ, replacing complex quote logic that engineers previously hand-wrote and debugged per customer
- Engineered a deterministic agent workflow (Python, TypeScript, OpenAI and Anthropic APIs) exposed through a Model Context Protocol server, compiling requirements into pricing rules under a grammar that rejects invalid plugins
- Cut plugin development cycles by 90% and logic regressions by 40% across 25+ production pricing plugins, gating every deploy on automated validation through Docker CI/CD with runtime telemetry on generation failures

PROJECTS

Access Wayfinder | React Native, Expo, Supabase

Present

- Led 12-person team building an iOS accessibility app (React Native, Expo) with category filters, venue search, and a Supabase-backed image pipeline, shipped to the App Store through EAS
- Achieved 3,000+ users, 5.0 star rating, and major media coverage (PBS, NJ.com) recognized for inclusive design impact

SocialPhysics | Python, Streamlit, Google STT

January 2026

- Architected a thread-safe pipeline using Resemblyzer and Google STT to classify speech events with sub-second latency
- Built a Streamlit analytics engine with a custom "Attention Economy" scoring algorithm and force-directed Pyvis network graphs to visualize real-time conversational power dynamics and speaker influence across multiple participants

TennisTrades | Python, XGBoost, Celery, Redis

December 2025

- Developed a modular trading engine in Python using Celery and Redis for async data ingestion, processing live ATP match streams and executing sub-second limit orders on Kalshi prediction markets via a custom REST API wrapper
- Implemented scalable XGBoost inference pipeline, automating feature engineering on 5k+ matches to achieve >75% accuracy

TECHNICAL SKILLS

- **Languages:** Python, Java, JavaScript, TypeScript, C, SQL, Go, Bash/Shell, MATLAB, Scheme, HTML, CSS
- **Frameworks:** React/React Native, Node.js, Express.js, Flask, NumPy, Pandas, TensorFlow, PyTorch, XGBoost
- **Developer Tools:** Git, Docker, Linux, CI/CD, MCP, Supabase, Salesforce CPQ, AWS (Lambda, DynamoDB, IAM, CDK)
- **Interests:** Tennis, Music Production and DJing, Golf, Poker, Food, Stand-Up Comedy, Horror Movies, Coffee