

Andrew Ho

github.com/anmho
andrewho.io

EDUCATION

University of California, Irvine

Expected June 2025

B.S. in Computer Science, Minor in Statistics

GPA 3.87

Coursework: Relational Databases, NoSQL, Algorithms, Search Engines, Distributed Systems, Operating Systems

EXPERIENCE

Snap Inc.

Sep. 2023 – Oct. 2023

Software Engineer Intern

Santa Monica, CA

- Designed and implemented multi-dimensional range partitioning algorithm using *Java*, *Beam*, & *Spark* to evenly distributed hot-key across *Apache Druid* worker node segments
- Improved quantile sketches query speed and cut down compute costs by **35%** caused by hot-key and CPU underutilization using data locality using range partitions and salted indexes allowing cluster scale-down.

Irvine Fintech Association

Jan. 2024 - Present

VP of Projects

Santa Monica, CA

- Leading inaugural projects team to allow exploration of financial technology innovations such as neobanking, personal lending, and credit risk assessment using machine learning techniques
- Designing workshops to educate members on application integration with tools like *Stripe*, *Ramp*, & *Plaid*

ICS Student Council

Nov 2023 – Present

Project Lead

Irvine, CA

- Led migration to serverless microservice architecture with AWS Lambda, API Gateway, Node.js, and DynamoDB to power popular academic tools with **20,000+ active users** such as *Zotistics* and *AntAlmanac*

Snap Inc.

June 2023 – Sep. 2023

Software Engineer Intern

Santa Monica, CA

- Developed streaming ingestion for big data visualization platform for Snap ranking and engagement ML models
- Deployed *Apache Kafka* cluster on *GCP Kubernetes Engine* to process **200TB** ads metrics data stream each day
- Integrated directly with Snap Envoy service mesh using **Go**, gRPC, and Helm to reduce redundancy saving infra costs by **33%**.

UCI Student Center & Event Services

Dec. 2022 – Present

L4 Software Developer

Irvine, CA

- Spearheaded a data exploration tool to assess employee performance and streamline data export to annual reports, saving 100+ employee hours during fiscal year-end using *C#*, *Typescript*, *D3.js*, and *AWS Lambda*
- Utilized *C#*, *.NET*, *AWS EC2*, *Jenkins*, and *SQL Server*, *Angular* to build employee management suite, student employee scheduling, and event booking services.

PROJECTS

Bobarank.com - Bubble Tea Discovery *Typescript, Next.js, React, Tailwind, MongoDB*

- Built a platform for users to discover the best boba stores in their area
- Users can vote in in Head-to-Head competitions to update the elo rankings of boba stores.

Zotlease - Student Housing Marketplace | *Go, React, React-Native, Stripe, AWS, Supabase Auth*

- Built student platform to find subleases and roommates to using React, React-Native, Go, and CockroachDB
- Implemented automated payment processing using Stripe Connect to improve user experience and security

Multithreaded Distributed Key-Value Store | *Go, gRPC, Docker, Kubernetes*

- Developed distributed key-value store in **Go**, using **Raft**, log-structured merge tree, and bloom filters
- Implemented hot-cold system using LRU eviction and compaction to improve performance.

TECHNICAL SKILLS & AWARDS

Languages: Go, Python, Java, TypeScript, Scala, HTML, CSS, SQL, R, C, C++

Tools/Frameworks: Spring Boot, Flask, Django, Kubernetes, Docker, gRPC, GraphQL, AWS, Google Cloud, React, PostgreSQL, MySQL, Node, Git, MongoDB, Cassandra, DynamoDB, Spark, Stripe, PyTorch, pandas, numpy

Awards: Winner of **Stanford's** health{hacks} 2021 hackathon out of **178** participants. Presented a stochastic agent-based machine learning pandemic simulation tool built over 24 hours to a panel of **9** Ivy League judges.