

Andrew Ho

github.com/anmho
andrewho.io

EDUCATION

University of California, Irvine

Expected June 2026

Bachelors in Computer Science

GPA 3.7

Courses: Efficient ML Computing, NoSQL, Search Engines, Distributed Systems, Operating Systems, Databases

EXPERIENCE

Tesla | Full-Stack Software Engineer Intern

Incoming Sep. 2024

Engineering Automation Software

Palo Alto, CA

- Full-stack developer working on engineering and simulation software using *React*, *Typescript*, *Kafka*, *AWS*, and *Go*

Snap Inc. | Backend Software Engineer Intern

Jun. 2024 - Present

Messaging Core Service

Los Angeles, CA

- Developed new features for the Snapchat messaging core service using *Go*, *gRPC*, *DynamoDB* and *AWS*
- Built chat wallpaper feed bump and notification feature, resulting in a 1.2% increase in Snapchat+ subscriptions.
- Collaborated with *Meta* to create rich URL previews for *Instagram* chat links using oEmbed Graph API.

Snap Inc. | Software Engineer Intern

Sep. 2023 – Oct. 2023

Monetization – Ads Analytics

Los Angeles, CA

- Designed and implemented multi-dimensional range partitioning for *Apache Druid* analytics database cluster.
- Created *Apache Beam* & *Spark (PySpark)* pipelines to evenly distribute rows across data segments.
- Utilized salted range indexes and *quantile sketches* to improve query speed and reduce required compute by 35%.

Snap Inc. | Software Engineer Intern

June 2023 – Sep. 2023

Metrics Stream Processing

Los Angeles, CA

- Deployed *Apache Kafka* cluster using *Kubernetes* to process *200TB/day* analytics metrics stream
- Developed real-time data warehouse ingestion into *Google Cloud Storage* using *Apache Druid* streaming ingestion

Operating Systems Course Assistant

Apr. 2024 – Jun. 2024

University of California, Irvine

Irvine, CA

- Assisted students with operating systems coursework in *C* for processes, threads, memory, networking
- Held weekly office hours to assist students with assignments and concepts of operating systems

PROJECTS

Bobarank – Milk Tea Leaderboards | *React*, *Typescript*, *Next.js*, *Tailwind*, *Postgres*, *Drizzle*

- 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

Ride Reservation API | *Go*, *Postgres*, *Stripe*, *NATS*, *Redis*

- Utilized idempotency keys and multi-phase transactions for safe retries and atomic commits with *Stripe*.
- Built a background job system with *NATS* to handle asynchronous tasks like email receipts.

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

- Developed multithreaded distributed key-value store cluster in *Go*, using *Raft*, *LSM trees*, and bloom filters
- Implemented hot-cold system using LRU eviction and compaction.

Web Search Engine | *C++*, *Python*, *React*, *Redis*, *Docker*

- Created a search engine that parses 55,000+ pages, returning high relevance results within 300ms using PageRank

TECHNICAL SKILLS & AWARDS

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

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