

Andrew Ho

github.com/anmho
andrewho.io

EDUCATION

University of California, Irvine

Expected June 2025

B.S. in Computer Science

GPA 3.71

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

EXPERIENCE

Software Engineer Intern | Messaging Services

June. 2024 - Sep. 2024

Snap Inc.

Los Angeles, CA

- Incoming backend and machine learning intern on Snapchat messaging platform. Working with *Go*, *PyTorch*, *AWS*

L4 Web Developer | Event & Booking Services

Dec. 2022 – Present

UCI Student Center & Event Services

Irvine, CA

- Spearheaded a data analysis dashboard to assess employee performance and streamline data export to annual reports, saving **100+** employee hours during fiscal year-end using *C#*, *.NET*, *Typescript*, *D3.js*, and *SQL Server*
- Overhauled employee management tools such as *LevelUp* performance review platform, booking and reservation services to streamline planning procedures

Learning Assistant | ICS 53 – Principles of System Design

Apr. 2024 – Present

University of California, Irvine

Irvine, CA

- Assisted students with operating systems coursework including syscalls, processes, threads, virtual memory, scheduling, networking, and synchronization
- Held weekly office hours to assist students with assignments and concepts of operating systems

Software Engineer Intern | Monetization Platform

Sep. 2023 – Oct. 2023

Snap Inc.

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 using *quantile sketches* and salted range indexes to eliminate hot-keys and improve query speed and compute costs by **35%**
- Served analytics data through *Hasura GraphQL* proxy to *React* dashboard, reducing load times by **13%**

Software Engineer Intern | Ads Analytics

June 2023 – Sep. 2023

Snap Inc.

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
- Integrated with *Envoy* service mesh using *Go*, *gRPC*, and *Helm* saving infra costs by **24%**

Projects Team Developer

Nov 2023 – Present

ICS Student Council

Irvine, CA

- Developing a dining tracker to view dining hall menus, schedules, and nutrition facts using *React-Native*
- Built serverless backend to process 100+ dishes per day *ZotMeal* using *AWS Lambda*, *API Gateway*, *Typescript*, *Node.js*, and *PostgreSQL (AWS RDS)*

PROJECTS

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

- 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

Map Reduce Implementation | *Go*, *Docker*, *Amazon Web Services*

- Implemented a distributed MapReduce framework using *Go* for parallel processing of large datasets
- Driver process distributes tasks among workers and handles worker failures through RPC communication

Distributed Key-Value Store | *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.

TECHNICAL SKILLS & AWARDS

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

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