# Andrew Ho

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## **EDUCATION**

## University of California, Irvine

Exp. June 2025

B.S. Computer Science

GPA 3.85

Coursework: Data Structures and Algorithms, Computer Architecture, Machine Learning, Databases, Design & Analysis of Algorithms, Probabalistic Graphical Models for Machine Learning

## **EXPERIENCE**

## Snap Inc. | Backend, Microservices

Jun. 2023 - Present

Software Engineer Intern

Santa Monica, CA

- · Utilized Kafka distributed event streaming to construct a real-time analytics backend for KPIs to better adjust monetization and ranking models, improving ads ranking accuracy and A/B cost analysis by 14%
- Streamlined developer workflow by creating Docker dev cluster, reducing ramp up time by 12%.
- Applied gRPC API endpoints to integrate with existing service mesh microservice architecture, saving infra costs by 43%
- Leveraged Strimzi operators, GKE, Kubernetes, and Helm to orchestrate the Kafka cluster.
- Optimized **Druid's** multi-dimensional range partitioning algorithm to maximize parallelism, improving batch pipeline and ad-hoc query performance by 22%

# University of California, Irvine

Dec. 2023 - Present

Full-Stack Web Developer

Irvine. CA

• Building scalable C# REST APIs, Student Center tools such as internal employee management tools, bookings, analytics tools, and student body applications using SQL Server, JavaScript, TypeScript, Angular, AWS EC2, C# ASP.NET SCSS, Jenkins, and Grafana

# Snap Inc. | Full Stack & Leadership

Jun. 2022 - Aug. 2022

Software Engineering Scholar

Santa Monica, CA

- Developed Snapchat feature addressing food-security using React-Native, Firebase, Firestore, and Auth
- Integrated scan functionality allowing users to scan unfamiliar ingredients for related recipes, tutorials, snack facts, and Apple Maps API to find affordable ingredients in user's proximity.
- Collaborated in cross-functional environment including UI/UX design and marketing teams in partnership with the non-profit, *Our Own*.

## **PROJECTS**

Watchlist - Machine Learning Movie Recommendations | Flask, React, PostgreSQL, Chakra-UI, pandas, Kubernetes, AWS EKS

- Constructed Flask microservices powered by machine learning to provide ML movie recommendations and additional core functionality to **React** frontend.
- Designed collaborative filtering ML model trained with MovieLens dataset with over 2.5 million ratings and TMDB API, using cosine similarity methods.

WealthTracker - Personal Finance | Flask, React, Docker, ECS, Stripe API, Plaid

- Developed **React** web app client to display any user's finance analytics.
- Deployed Flask server utilizing Plaid API to handle bank integrations requests and fetch bank, credit, and investment data. Utilized ARIMA to analyze spending anomalies

## SKILLS

Languages: Python, JavaScript, TypeScript, Go, Java, HTML, CSS, SQL, R, C, C++, Arduino Tools/Frameworks: gRPC, Flask, Django, React.js, PostgreSQL, MySQL, Node.js, Selenium, AWS, Docker, Kubernetes, React-Native, Bootstrap, Chakra-UI, Webpack, Vite, TailwindCSS, scikit-learn, pandas, numpy, Ubuntu, Code, Android Studio, Git, GitHub, Cassandra, PySpark, , Gradle

## AWARDS

Competitions – Winner of Stanford's health{hacks} 2021 hackathon out of 178 participants. Designed a machine-learning pandemic simulation tool over 24 hours with JavaScript, HTML, CSS, MySQL. Presented to a panel of 9 Ivy League judges. Awards – IVC Dean's List (3.5 GPA or higher), AP Scholar w/ Distinction, IVC Scholarship Foundation Organizations - Data at UCI, Hack at UCI, ACM, Music Education for Undergraduates, Autonomous Roomba Team