

AYAN MAO

Palo Alto, CA

☎ 206-673-6739 ✉ mayforsde@gmail.com [in linkedin.com/in/ayan-mao](https://www.linkedin.com/in/ayan-mao) [🐙 98may.github.io](https://github.com/98may)

About Me

Hello, I'm Ayan Mao, a software engineer with 2.5 years of experience in ads, based in the Bay Area on h1b visa. I've been working in X/xAI ads team (sized 20) for 2 years.

Elon Musk is my skip manager and we ads team has weekly meeting with him. My focus is ads serving backend and applied AI. I got promoted and salary raise in 11 months at X, and got a special 40% salary raise this summer.

I make ads system print money smoothly and quickly/stably.

Experience

X/xAI (Twitter)

Feb. 2024 – Now

Software Engineer @ Ads Team | Java, Scala, Python

Palo Alto, CA

- Led two junior engineers to deprecate the old ads ranking service successfully, by migrating new-generation ranking model call and auction library into ranking stage of the orchestra service, which supported the epic new-generation ranking model's launch and deleted/simplified tons of legacy ranking code
- Integrated, optimized and scaled Google Mobile Ads into X's demand-side platform; driving revenue 150x growth from one digit million per year within 4 months
- Owned all takeover ads product, including promoted trend, spotlight, first-view timeline and video; ensured its delivery quality and implemented new features for advertisers
- Utilized grok to summarize and categorize ads and user profile as a new ads retrieval source, also vibe-coded to visualize it; grok-based ads became one of most high performance retrieval source
- Enhanced ads fatigue quality to serve more diverse ads, increased click rate by 1.3% and user active seconds by 0.2%

Internships

Google

Aug. 2022 – Nov. 2022

Software Engineering Intern @ Ads Mobile Team | Java, Lua, GCP

Mountain View, CA

- Delivered a complete prototype (Metaverse Ads) including a Lua SDK with asynchronous unit tests
- Designed and implemented an end-to-end advertising pipeline in virtual 3D world from scratch, integrated GMA with selected Metaverse platforms, highlighting potential expansion opportunities beyond iOS and Android
- Optimized mobile ads' close button, tested and released it for billions of Android users using Android Studio

Meta (Facebook)

May 2022 – July 2022

Software Engineering Intern @ Ads Infra Team | C++, Python

Menlo Park, CA

- Enhanced ads internal testing platforms by automating A/B tests on test and prod machines, which generated a detailed URL and performance metrics for different commits
- Increased debugging efficiency with scalable features and automated bug fixes, saving engineers 2 hours each time in troubleshooting parent and child canary instances within the ads performance testing system

Microsoft Research Asia

Oct. 2020 – June 2021

Research Intern @ System Research Group | Python, Typescript

Beijing, China

- Contributed features like new parameter auto-tuners to the NNI (Neural Network Intelligence: an Open Source AutoML Toolkit for Machine Learning Lifecycle, GitHub 13.2k star), during which NNI added over 3000 GitHub stars
- Increased the diverse downstream search strategies' effect by 24%, with innovative Unsupervised Architecture Representation Learning and NLP-NAS-Benchmark migrated to NAS

Technical Skills

Programming Languages: Java, Scala, C++, Python, Lua, C, Shell scripting

Development Platforms: Linux, AWS, GCP, Xcode, Docker, Arduino, Unity

Frameworks and Tools: MySQL, Hadoop, React, Valgrind, Scalding, gdb, scripts, LaTeX, Maven, Gradle

Education

Northeastern University

2021 – 2023

Master of Science in Computer Science

Seattle, WA

Zhejiang University

2017 – 2021

Bachelor of Engineering in Computer Science

Hangzhou, China