

Josh Chou

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Education

University of Washington

Bachelor of Science in Computer Science, Minor in Neural Computation, Entrepreneurship

Relevant Coursework: Data Structures and Algorithms, Distributed Systems, Machine Learning, Databases, Advanced Algorithms, System Design, Discrete Probability, Linear Algebra

Y Combinator AI Startup School

Selected as one of the top **2000** CS undergrads, masters, and PhD candidates around the world specializing in AI.

Technical Skills

Programming Languages: Java, C/C++, Python, TypeScript/JavaScript, SQL, HTML/CSS, Swift, GraphQL, Dart

Frameworks/Libraries: NodeJS, TensorFlow, PyTorch, Scikit-learn, SwiftUI, RASA, Flutter, Playwright

Tools/Platforms: Firebase, Azure, Git, Figma, Adobe Suite, Cursor, Supabase

Certifications: Supervised Machine Learning: Regression and Classification (DeepLearning.AI, Stanford University)

Work Experience

Amazon Web Services

Software Development Engineer Intern

- AWS Control Tower

Affable BPM

Product and Software Intern

- Developing and maintaining end-to-end test automation suites using Playwright to ensure UI reliability.
- Refining product narrative and investor messaging in direct collaboration with the founder.
- Leading customer discovery interviews and market research to identify high-potential verticals for go-to-market efforts.

Amazon Web Services (Typescript, GraphQL, AWS Suite)

Software Development Engineer Intern

- Designed and deployed a high-throughput real-time fraud detection workflow, processing **50 million** AWS activity logs daily, reducing fraud detection time from **15-60 minutes to seconds** and improving security response time by **95%**.
- Built a scalable, event-driven system leveraging **AWS Lambda, Kinesis, SQS (message queuing), and SNS (real-time notifications)**, ensuring fault-tolerant processing and instant fraud alerts.
- Received internal recognition for the project's impact (see Honors & Awards).

Data Analytics and Intelligent Systems Lab (RASA, Python, Django)

Research Intern

- Engineered an automated summarization feature that **condensed 5-hour therapy sessions into 2-minute insights**, improving therapist review time and user satisfaction.
- Experimented and tested over **20 different transformers** on Hugging Face, identifying the optimal one that improved our chatbot's **response accuracy by 30%** and **processing time by 15%**.

Projects

TestDrive.AI

- Developed a full-stack computer vision application that automates driving test evaluations by analyzing dash-cam and driver-facing footage to detect violations such as lane drifting, tailgating, and smartphone usage.
- Technologies: Python, OpenCV, PyTorch, YOLOV8, Intel oneAPI, Next.js, Tailwind, Ultralytics

Mini Google

- Built a modular search engine with a file crawler, in-memory query processor, and persistent index storage using architecture-neutral marshalling.
- Implemented a multithreaded web server interface, supporting concurrent search requests and resource management.
- Technologies: C, C++, Valgrind, GDB

Honors and Awards

Amazon AWS Spark Fair Winner

- Selected as the top-performing intern across all disciplines, voted by Amazon engineers for delivering a high-impact, cost-efficient real-time fraud detection system.

DubHacks Hackathon Winner (Project: WakeBox)

- Won first place at the largest hackathon in the PNW (12,000+ competitors).
- Engineered a multifunctional alarm clock, integrating physical and mental tasks for deactivation.