

Andy Vu

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Education

Northwestern University, Evanston, IL

June 2026

Bachelor of Science, Major in Computer Science

- **Undergraduate Teaching Assistant:** Supported 100+ students in C/C++ programming and scalable software design
- **Relevant Coursework:** Parallel Computing, Intro to AI, DSA, Computer Networking, Algorithms, Operating Systems

Work Experience

Robinhood

June 2025 – September 2025

Software Engineer Intern

Menlo Park, CA

- Built a full-stack LLM chatbot with **React** and **Python/FastAPI** for experiment analysis, streamlining tasks for 50+ data scientists
- Designed agent workflows in **Python** with tool calling and context management, reducing token usage by 90% and costs by 75%
- Created a **Python/Django + PostgreSQL** service to store chatbot conversations and enable analysis of user and LLM behavior
- Led the team's first AI initiative by deploying foundational infrastructure with **Kubernetes** and monitoring with **Grafana**
- Boosted performance of a high-traffic search filter by over 50% through optimized **SQL** queries and redesigned **Django** endpoints

Polo App

June 2024 – September 2025

Co-founder, CTO

Evanston, IL

- Engineered and launched a campus-only iOS marketplace using **Swift** and **Firebase**, leading a 3-person development team end-to-end
- Implemented image compression and client-side caching with **Kingfisher** to reduce upload and download latency by 40%
- Optimized Firestore data models to minimize reads/writes, improving app responsiveness and lowering database costs
- Scaled the app to 300+ active users, 500+ live listings, and \$1500+ in transactions through social media and in-person marketing

Mayfest Productions

January 2024 – June 2024

Mobile App Developer

Evanston, IL

- Developed a **React Native** app for the Dillo Day music festival with schedules, live updates, and maps, engaging 10,000+ attendees
- Gained \$3,000+ in sponsorships by collaborating with cross-functional teams to create a sponsor showcase UI

Infosys

June 2023 – August 2023

Software Engineer Intern

Bangalore, India

- Built a REST API service using **Java Spring Boot**, **PostgreSQL**, and **Docker** to streamline visitor check-ins for 20,000+ users
- Implemented OAuth2.0 authentication with **Keycloak** and rigorously tested the backend using **Postman** and **jUnit**

Technical Projects

LeetCodePatterns.ai | Website | Source Code

React | **Typescript** | **Express** | **Firebase**

- Launched a **React** web app that helps 100+ active users learn common patterns in LeetCode-style algorithm problems
- Designed a multi-modal AI interviewer agent, leveraging **Gemini** and **Deepgram STT** for speech recognition
- Implemented a **WebSocket** server with **Express.js** to enable real-time speech transcription and stream LLM responses

World Relief Data Entry System

Next.js | **Firebase**

- Created a **Next.js** web app with a **Firebase** backend to store and search job opportunities for 1,000+ immigrants and refugees
- Migrated over 5,000 rows of historical job data and implemented search/query features, boosting operational efficiency by 30%

Quick Mental Math App | App Store | Source Code

Swift | **Java Spring Boot** | **AWS** | **PostgreSQL**

- Launched an iOS app using **Swift** that helps students efficiently learn mental math, gaining 7000+ users on the App Store
- Developed a secure REST API backend with **Java Spring Boot** and **PostgreSQL** and deployed it on **AWS EC2** with **Docker**

Technical Skills

Languages: Swift, Python, Java, JavaScript, TypeScript, C, C++, Go, SQL, HTML, CSS

Tools: Unix/Linux, Docker, Git, Cloud Services (AWS / GCP / Firebase), Bazel, Kubernetes, OAuth, MCP, Grafana, Postman

Core Skills: Full-Stack Development, Data Structures & Algorithms, OOP, Database Design, REST APIs, Prompt Engineering