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

LeetPatterns.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