

# Andrew Zhang

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## EDUCATION

### Georgia Institute of Technology

Incoming, Aug 2026 - May 2027

*M.S. Computer Science*

### University of Maryland, College Park

Sept 2022 - May 2026

*B.S. Computer Science / Minor in General Business*

*College Park, MD*

GPA: 3.7/4.0 - University Honors & Dean's Merit Scholarship Recipient

### Yonsei University (Seoul, KR)

Study Abroad Exchange Program

## WORK EXPERIENCE

### USAA

May 2025 – Aug 2025

*Software Engineering Intern*

*San Antonio, TX*

- Engineered secure, high-availability payment and billing flows by migrating from embedded WebView to native Android (Kotlin/Jetpack Compose) and iOS (SwiftUI) components, ensuring reliability for **14M+** members.
- Integrated new RESTful billing APIs, designing robust authentication, caching, and error-handling strategies
- Partnered with product managers and designers in Agile sprints (JIRA) and conducted peer code reviews in GitLab CI/CD, shipping production code that reduced load times by 18%.

### CCACC Academy

June 2024 - Oct 2024

*Web Developer | Aug 2024 - Oct 2024*

*Rockville, MD*

- Built a fully responsive **16-page** React site using HTML, SCSS, and TypeScript, ensuring cross-device compatibility and accessibility best practices.
- Integrated third-party APIs and JavaScript libraries (calendars, payment forms, scheduling tools) to support a dynamic, customer-facing experience.

### University of Maryland

Jan 2024 - Aug 2024

*Research Assistant @ Dr. Gasarch's lab*

*College Park, MD*

- Translated complex algorithmic proofs into modular Python simulations, automating complexity analysis for SAT and NIM variants and cutting runtime by **25%**.
- Proactively designed and debugged ML-inspired modules over **5,000+** lines of code, ensuring reliability and reproducibility of experimental results.

## PROJECTS

### E-Commerce Restock Alert System

Feb 2025 - April 2025

- Built a real-time restock alert tool using Go, AWS Lambda, and Terraform to monitor **5+** e-commerce pages on a scheduled interval with a cron job via AWS Eventbridge
- Integrated Telegram and Twilio APIs to notify users of restocks, enabling **50+ successful** purchases of high-demand items.

### RAG-Powered AI Assistant for FDA Guidance

Dec 2024 - Jan 2025

- Developed and deployed an FDA guidance chatbot using Retrieval-Augmented Generation (RAG) with OpenAI, LangChain, and Pinecone to assist with querying **2000+ pages** of regulatory documentation.
- Fine-tuned retrieval and prompts to cut lookup time from ~6 to ~2 minutes across 10+ FDA queries, enabling **3x** faster navigation.

### Calorie Tracker Web App

Nov 2023 - Jan 2024

- Designed a **Django** backend + **JavaScript** frontend for logging meals, querying third-party APIs, and visualizing calorie/macronutrient trends.
- Collaborated in a 3-person team with Git, applying relational DB schema design and REST endpoints

## SKILLS & INTERESTS

- Languages:** Python, Java, C, C++, Go, Swift, Kotlin, JavaScript, React, HTML/CSS, SQL, Ruby
- Technologies:** AWS, Git, Docker, Terraform, Flask, NoSQL, Django, PyTorch, TensorFlow, OpenAI, Node.js
- Interests:** Investing, Cooking, Weightlifting, Video Games, Film, Hiking, Soccer, Volleyball