

# Ga Eun (Sarah) Yun

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## Education

### California Institute of Technology (Caltech)

Bachelor of Science in Computer Science

Pasadena, California

*Sept 2020 – June 2024*

- **Courses:** Data Structures, Algorithms, Machine Learning, Probability and Statistics, Software Design, Decidability and Tractability, Computing Systems, Databases, Image Processing, Computer Vision
- **Teaching Assistant:** Functional Programming (OCaml)

### University College London (UCL)

Caltech London Scholars Program (Study Abroad)

London, United Kingdom

*Sept 2022 – Dec 2022*

## Experience

### Amazon (Prime Video)

Software Development Engineer

*July 2024 – Current*

- Build and maintain AI/ML-based systems that identify and combine duplicate titles within Prime Video's catalog, ensuring a cleaner and more user-friendly catalog.
- Developing APIs that streamline process of checking if TV shows and movies can be safely combined, reducing manual review by 10% and improving user content discovery for millions for global subscribers.

### Microsoft

Software Engineering Intern

*June 2023 – September 2023*

- Enhanced Microsoft Intune's health assessment system to automatically detect and remediate security vulnerabilities across managed devices. Built real-time device status dashboards and performance metric tracking for IT administrators. Developed scalable client-server using C#, Azure Cosmos DB, Azure Functions, and React.

### Amazon (Fintech)

Software Development Engineer Intern

*Summer 2022 & Spring 2023*

- **March 2023 – June 2023:** Engineered an innovative multi-tenant chatbot to deliver real-time assistance to compliance and audit teams across Amazon. Architected and deployed AWS Lambda functions for automated ticket creation and seamless DynamoDB integration, reducing on-call engineer workload by an estimated 15%.
- **June 2022 – September 2022:** Optimized the daily foreign exchange rate calculation process for Amazon's global accounting teams, reducing processing time from 2 hours to under 15 minutes (87% improvement) through native AWS infrastructure. Designed Lambda functions to automate FX data retrieval from S3, calculations via Lambda, storage in DynamoDB, and real-time stakeholder notifications using SNS.

## Selected Projects

- **AI College Admissions Counselor:** LLM-powered full-stack platform generating personalized roadmaps, school matches, and admissions strategy. Beta testing at Polytechnic High School. Live at collegenavigate.com.
- **Resy Reservation Sniper:** Multi-threaded Resy booking bot using proxy rotation to avoid throttling, Twilio SMS alerts, and adaptive polling to find last-minute cancellations.
- **Multilingual School RAG Chatbot:** High school-specific multilingual chatbot built with AWS Bedrock, Elasticsearch, and custom webcrawler to improve information access for non-native English families.
- **Personal AI Life Assistant:** Aggregated Google Calendar, Notion, and Oura Ring data via LLM and API orchestration to optimize personal routines.
- **Caltech SURF – Lunar Dust Shield Simulation:** Simulated electrostatic dust repulsion systems in COMSOL; NASA BIG Idea finalist; SURF Fellow under Prof. Soon-Jo Chung.

## Skills

**Technical Skills:** Python, Java, OCaml, JavaScript, TypeScript, SQL, AWS, Pandas, Pytorch, Tensorflow

**Languages:** Korean (native), Spanish (intermediate)

**Interests:** Solo-travel, yoga, pilates, aerial silks, ceramics, baking, crochet, personal development, cats

## Honors and Awards

- Caltech Bill Gross Prize for Entrepreneurship, 1st Place (\$30,000)
- Unusual Ventures University Founder Fellow (\$30,000)
- Jane Street INSIGHT Fellow 2022
- D.E. Shaw Group Discovery Fellow 2022
- Dingwall Foundation Korean Ancestry Grant (\$40,000) 2020