

# Amy Song

Software Engineer

## EDUCATION

**Colgate University** | Hamilton, NY

B.A. in Computer Science & Economics

- Expected Graduation: May 2021
- Charles A. Dana Scholar for superior academic achievement and leadership (2019-2020)
- Cumulative GPA: 3.97/4.00
- Computer Science GPA: 4.07/4.00
- Economics GPA: 4.00/4.00

## RELEVANT COURSEWORK

Data Structures, Algorithms,  
Operating Systems, Computer Architecture,  
Discrete Structures, Theory of Computing,  
Software Engineering,  
Human-Computer Interaction

## TECHNICAL SKILLS

**Strong:** Java, JavaScript, TypeScript, SQL, PostgreSQL, REST APIs, Git, HTML, CSS, VSCode

**Experienced:** Python, Kotlin, Swift, C, Jenkins, Docker, Kubernetes, Kibana, Grafana, AWS Resources, Angular, NumPy, Pandas, Matplotlib

## CONTACT

amysong.com  
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GitHub: @amysong98

## EXPERIENCE

### Tinder | Software Engineering Intern, Backend

Los Angeles, CA | May 2020 - Aug 2020

- Developed and load-tested a reverse-geocoding service leveraging Redis data store to increase precision by alleviating edge-cases
- Developed RESTful APIs, wrote unit tests, added performance metrics, and integrated AWS technologies to create upcoming features
- Architected SQL queries to aggregate data across multiple AWS RDS Postgres tables and implemented cron jobs to automatically schedule specific deletion queries
- Updated schemas and added new columns to production AWS RDS Postgres tables and updated API models to reflect changes in use cases

### Certua | Data Science + Machine Learning Intern

London, UK | October 2019 - October 2019

- Designed and developed linear and neural network models using Python libraries including TensorFlow, NumPy, Pandas, and Matplotlib
- Trained models to detect credit default risk for small businesses to help the company move away from using a third-party software to decrease operating costs

### Tinder | Engineering Intern, Mobile

Los Angeles, CA | Jun 2019 - Aug 2019

- Won first place in Tinder Internship Hackathon by designing and presenting an innovative game-based feature to the entire company, including company executives
- Migrated legacy Java code into Kotlin for the entire edit-profile page and API adapters for third-party integrations including Spotify and Instagram, which increased code compatibility, readability, and speed
- Used MVP architecture for Android while contributing to camera-upload features and projects related to sexual orientation
- Migrated legacy Objective-C code into Swift for gamepad buttons on the iOS application which led to better performance and code compatibility

### Colgate University | Computer Science Teaching Assistant

Hamilton, NY | Sep 2018 - May 2019

- Debugged student code and answered questions regarding Python and computer architecture assignments for a group of 20 to 30 students during lab

### Colgate University | Information Technology Service

Hamilton, NY | Jan 2018 - May 2020

- Troubleshoot software downloads, connectivity, printer driver installs, and other technical issues

## PROJECTS

### Colgate Scheduler

- Developed a course-planning application using Angular that Colgate students use to create optimized course schedules that fit best among all possible combinations of courses
- Utilized RESTful APIs to retrieve course information from the university catalog and hosted the application on Google Firebase

### amysong.com

- Created a personal portfolio website to document personal growth in computer science as well as to showcase my creative side