

# Sophia Wang

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## Education

### Cornell University, College of Engineering

Bachelor of Science in Computer Science

GPA: 3.76/4.0 | Dean's List

Ithaca, NY

Expected May 2026

**Related Courses:** Analysis of Algorithms, OOP & Data Structures, Functional Programming, Machine Learning, Data Science, Computer Vision, Design & Progr. for the Web, Intro to iOS, Intro to Backend, Probability Models & Inference

**Activities:** Social Officer (Assoc. of CS Undergrads), Technical Committee, Mentor (Women in Computing @ Cornell)

## Experience

### Imaging Systems Engineer

October 2022-Present

Cornell University Unmanned Air Systems

Ithaca, NY

- Spearheading a new system with Spring Boot to save local image and tagging data to an AWS EC2 PostgreSQL database and displaying data on a React web app
- Developed REST APIs to send camera settings/commands from a React.js page to a Spring Boot backend to increase the efficiency by 200% of a ground server system that receives and manages aerial images
- Implementing a feature to aggregate and visualize archived data and statistics for 100+ applicants a year on an internal recruitment portal using Typescript and Prisma

### Student Training in Engineering Program (STEP) Intern

May 2023-August 2023

Google

San Francisco, CA

- Created a backend system using Java gRPC and Protocol Buffers to send deletion, deactivation, and reactivation emails with users' transit pass data to 500+ users/month in cities like San Francisco, Chicago, and DC.
- Led the design process by devising an in-depth design document with multiple implementation methods and conducting a design review with senior Google engineers
- Conducted JUnit testing and led bug bashes with mobile test devices alongside detailed test/launch documents
- Collaborated with cross-functional teams (UX, PM, legal, marketing) for successful user launch

### Computer Science Summer Institute (CSSI)

July 2022-August 2022

Google

Remote

- Participated in a 4-week intensive summer program for high-achieving students with a project-based HTML/CSS and JS curriculum taught by Google engineers, and configured 3 partner coding projects
- Built a live Monkeypox case tracker site with a partner that fetches data from an API and displays worldwide case numbers for 80+ countries, an interactive map, bar/pie charts, and general Monkeypox information
- Delivered a collaborative final project presentation with a live demonstration to Google employees

## Projects

### Spoken Digits Classifier | ECE 2720 | Python, NumPy, Matplotlib, Pandas, scikit-learn, Scipy.io

December 2023

- Trained an SVM classifier on and used Fourier transform to de-noise 40k WAV files, each with Gaussian white noise or high-frequency noise randomly added, that recognizes the two digits spoken in each file

### Sneep | Intro to Backend | Python, Flask, SQLAlchemy, Docker, Nltk, Google Cloud

December 2023

- Deployed an API with Docker and Google Cloud that stores sleep and dream data in a database with SQLAlchemy that has HTTP endpoints using Flask

### UnOCaml | CS 3110 | OCaml

December 2023

- Created a terminal-based simulator with a team of the card game UNO in OCaml that supports multiplayer and multi-round gameplay with human or smart robot opponents using functional programming principles
- Utilized agile software practices with test-driven development, feature sprints, and git for version control

### CUEat | Intro to iOS | Swift

December 2023

- Designed a recipe app frontend with SwiftUI that uses UICollectionViews and push controllers
- Engineered features for exhibiting recipe info and images, filtering, and adding new recipes to a database

## Technical Skills

- **Programming Languages:** Java, Python, Javascript, Typescript, HTML/CSS, SQL, OCaml, Kotlin, Swift
- **Frameworks/Libraries:** React, Redux, Flask, SQLAlchemy, gRPC, JUnit, JQuery, NumPy, Matplotlib
- **Developer Tools:** Git, Docker, VS Code, IntelliJ, Cloud Spanner, Bazel, Google Cloud, AWS