

# Jonathan Yu

✉ jonathanhyu2000@gmail.com ☎ (408) 623-0291

🌐 <https://github.com/JonathanY7> <https://linkedin.com/in/jonathanyu2> 🌐 Newark, CA

## Education

**University of California, San Diego**

B.S. in Computer Science

GPA: 3.75 / 4.00

Graduated: March 2022

## Work Experience

**Google | Software Engineer**

Sunnyvale, CA

June 2022 – Present

- Working on physical security in Google's data centers; coding with C++

**Amazon Web Services (AWS) | Software Development Engineer Intern**

Seattle, WA (Remote)

June 2021 – Sept 2021

- Merged millions of queryable files, reducing the amount of infrastructure team needs to manage as well as speeding up SQL queries by more than 5x through Python script involving AWS Glue
- Automated weekly SQL queries to gather statistics for team, saving engineer time on a weekly basis through Java and SQL code involving AWS Lambda
- Implemented a design document, wrote unit tests, and published code reviews in an Agile environment

## Projects

**Autonomous Vehicle Prediction**

March 2021 - June 2021

- Designed a motion forecasting machine learning model which predicted positions of vehicles three seconds into the future, given the trajectory of the vehicle for the first two seconds
- Used PyTorch libraries to construct a Long Short-Term Memory Network to train on sequential data
- Achieved an average Root Mean Squared Error value of 2.67471
- Coded with **Python**

**Simple Internship Management Platform**

March 2020 - June 2020

- Web scraped internship listings off of various websites and uploaded listings to MongoDB database
- Helped design a React.js application helping individuals find internship listings
- Collaborated in a team of 10 individuals to finish a fully functional application
- Web Scraper coded with **Python**

**Potentiometer-Controlled Robotic Arm**

June 2019 - Sept 2019

- Utilized an Arduino Leonardo board to control four potentiometers attached to robotic arm
- Connected Arduino Leonardo with breadboard and computer for controlling servos on arm
- Coded using **C and C++**

## Activities

**Website Editor | Circle K at the University of California, San Diego**

October 2019 - March 2020

- Updated and managed website, embedded and created forms, and replaced images of old board members
- Collaborated under Product Manager with other front end developers and UI/UX designers
- Coded using **HTML and CSS**

## Skills

**Languages and Tools:**

Java, C, C++, SQL, Git, Bash Scripting,  
Python, MATLAB, GNU Octave, R, HTML, CSS,  
Haskell, Verilog, ARM Assembly, x86 Assembly

**Technologies and Methodologies:**

PyTorch, Pandas, NumPy, Vim,  
Linux, Windows, iOS, Agile, Waterfall

## Awards

- 2nd place at Google UCSD WIC Beginner Programming Competition - Spring 2019
- 5th place at Microsoft UCSD WIC Beginner Programming Competition - Winter 2019
- USACO Silver Division
- Synopsys Science Fair - Honorable Mention