

# CAROLINE LIU

(626)319-7908 | [carolinexwliu89@berkeley.edu](mailto:carolinexwliu89@berkeley.edu) | <https://www.linkedin.com/in/caroline-liu-01071789081217/>

## EDUCATION

### University of California, Berkeley

August 2018 - May 2022

*Regent's and Chancellor's Scholar, B.S. Electrical Engineering and Computer Science / Chemical Biology double*

**Relevant Classes:** The Structure and Interpretation of Computer Programs (CS61A), Designing Information Devices and Systems I (EE16A), Data Structures (CS61B), Designing Information Devices and Systems II (EE16B)

**South Pasadena High School** | GPA: 3.99/4.68 (weighted) | Ranking: Top 1% of students

August 2014 - June 2018

*AP Scholar with Distinction* [2017, 2018] | *Outstanding Achievement in Mathematics by SPUSD* [2014, 2018]

## SKILLS

**Programming:** Java, Android Studio, Python 3, Scheme (LISP dialect), Javascript, Ruby, HTML, CSS, C++

**Biological:** designing PCR primers, DNA sequence analysis, mutation mapping, cancer cell identification, data analysis/manipulation, Sanger sequencing, DNASTar

**Other:** Node.js, Express, Bookshelf.js, Knex, Ruby on Rails, Django

## WORK EXPERIENCE

### Go SkyHy | Full Stack Development Intern

May 2019 - ongoing

- Working on a web service through which people can decide travel programmes, destinations, services, and more and connect with the people with an eventual goal to foster communication and understanding between different cultures and places in the world.

### UC Berkeley Disability Lab | Lab Project Lead

January 2019 - ongoing

- Access Control:* designed a database for user data based in Postgres with Node.js; automated door-opening system and safety mechanisms for tools and machinery for the disabled; used the Clipper card and the NFC reader for accessibility.
- Tactile Sex Ed:* designing and prototyping a shrunken-plastic model of human anatomical structures lined with LED and buzzer grids activating on a timing system, designed for integrating education on the human body for disabled and able-bodied students.

### USC Norris Cancer Center | Student Researcher, Intern

May 2016 - August 2018

- Conducted independent project detecting ductal carcinoma in-situ (DCIS) before metastasis based on DNA analysis of migratory cells and their predicted paths and abnormal and dangerous mutations; investigated cervical cancer, breast cancer (and its migration paths), human papillomavirus, PAP smears, and ovarian cancer under Dr. Suhua Lin and Dr. Darryl Shibata

### Varsity Tutors | Professional Tutor

January 2019 - ongoing

- Tutors students from K through college online in maths, biology, chemistry, computer science (JavaScript, Java, Python), economics, Mandarin Chinese, and French

### Personal Tutoring Business

2012 - Present

- Started tutoring business in 7th grade that referred other tutors to clients; started with 1 client/week to 6+ clients/week
- Topics Covered: AP Calculus BC and below, Statistics (Regular, AP), Chinese (Simplified), Chemistry (Regular, Honors, AP), Biology (Regular, AP), French (1/2 through 5/6 H), AP Computer Science A + Android Development, college essays

## LEADERSHIP

### The Hope Beyond Now | Founder

September 2017 - Present

- Developed social project with media presence to aid in the overarching long-term goal to reduce homelessness over the long run permanently in cities, educate the public, and create a documentary; in Los Angeles, Pasadena, Montecito Heights.

### Sharing Hands | South Pasadena Branch Head

Autumn 2015 - Present

- Started sock and clothing drive/fundraiser for homeless as a part of Sharing Hands organization; goes to Skid Row once a month to make and distribute over 1000 lunch packages to homeless; *Totals:* 525.5 pairs (2015); 2312 pairs (2016); 3472 pairs (2017)

### Music in Measures | Founder; President

October 2015 - July 2018

- Student group that performs at senior centers, hospitals, orphanages, and volunteers; fundraised \$2000+ for Feed the Children

## ORGANIZATIONS

### Regents and Chancellor Scholarship Association | Corporate Relations Committee

2018 - Present

- Association for those offered the Regents Scholarship which is an award given to the top 1.5% of incoming students at Berkeley
- Partners with corporations to create professional development opportunities to students

### ANova - Computer Science Mentors and Educators | Technology Committee, Site Leader Committee

2018 - Present

- Teach CS to and serves under-resourced communities in the Bay Area; employed in 14 schools; runs annual ANova Hacks
- Tech committee projects: Mobile Device Management System, check-out system for laptops, deploying Ok.py for curriculum, hacking on Microbits for lesson plans, managing website, creating scripts for building EdTech tools.

## AWARDS/HONORS

### LA Science Fair - Engineering Applications, Senior Category

2nd Place [2015], Special Awards [2015, 2016]

### Caribou Maths Competition

US National Competition 4th Place [2016-2017]

### Code Day LA (Hackathon)

1st place [2014], Special Award [2015, 2016]

### President's Volunteer Service Award

Gold Award [2016-2017]