

# GIANNA WU

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(408) 318 - 7616 | gianna7wu@gmail.com | gianna7wu.github.io

## Education

**POMONA COLLEGE | B.A. COMPUTER SCIENCE, MATHEMATICS | GPA 3.90** **AUG. 2015 – MAY 2019**

- Coursework: Data Structures, Fundamentals of Computer Science, Discrete Mathematics, Computability and Logic, Computational Neuroscience, Adv. Mathematical Biology, Probability, Computer Systems, Graph Algorithms and Application, Algorithms, Database Systems, Mathematical Analysis, Differential Equations

## **SKILLS**

- Java (expert), Python (proficient), SQL (proficient), SML (proficient), LaTeX (proficient), MatLab (proficient), HTML/CSS (proficient), R (prior experience), C/C++ (prior experience), Rubygame (prior experience)

## Professional Experience

**DATA SCIENCE RESEARCH ASSISTANT, HARVEY MUDD COLLEGE** **MAY 2018 – PRESENT**

- Developing algorithms to discern underlying variables in cell differentiation under the guidance of Professor Lisette de Pillis and Dr. Jeho Park as part of an NSF funded summer research experience for undergraduates (REU)
- Applying mathematical and computational techniques including principal component analysis, diffusion mapping, and K-means clustering

**DATA SPECIALIST, SCRIPPS COLLEGE** **SEPT. 2017 – PRESENT**

- Create content and refurbish web architecture for the official Scripps College website and other on-campus institutions

**COMPUTER SCIENCE RESEARCH ASSISTANT, POMONA COLLEGE** **JUN. 2017 – AUG. 2017**

- Lead developer of a program to analyze temporal data based on Allen's Interval Algebra
- Produced visual representations of calculations using the open-source program, JFreeChart

**COMPUTER SCIENCE AND CHEMISTRY MENTOR, POMONA COLLEGE** **JAN. 2017 – PRESENT**

- Proctor weekly mentor sessions for computer science and chemistry students

**CHEMISTRY RESEARCH ASSISTANT, POMONA COLLEGE** **JAN. 2016 – AUG. 2016**

- Contributed to three chemistry research projects, including solar cells and dye adsorption, polyelectrolyte bilayers, and microbial peptides on mammalian and bacterial cells

## Awards

**BRUCE JAY LEVY MEMORIAL PRIZE | FALL 2018**

- Awarded annually to a student chosen by the Mathematics Department faculty for excellence in the field of mathematics

**POMONA COLLEGE SCHOLAR OF DISTINCTION | FALL 2015, SPRING 2016, FALL 2016**

- Awarded to students ranking in the top 25% of their class

**3<sup>RD</sup> PLACE, ADVANCED CATEGORY | 5C SPRING HACKATHON 2016**

- Created an interactive game in Rubygame to allow for real-time control of a virtual character using muscle and brain signals
- Built an electromyogram circuit (EMG) and rerouted an electroencephalogram (EEG) to an Arduino

**CRC AWARD FOR EXCELLENCE IN GENERAL CHEMISTRY | SPRING 2016**

- Awarded to the highest-ranking student in chemistry in the freshman class

**BEST APP FOR SCALING HUMAN CONNECTIONS | 5C FALL HACKATHON 2015**

- Developed a website using Instagram's API Platform, PHP, and MySQL to provide a visual guide for the dining hall menu

## Extracurricular Activities

**DIRECTOR, CAMP KESEM AT THE CLAREMONT COLLEGES** **AUG. 2016 – PRESENT**

- Student director of a non-profit organization that supports children through and beyond their parents' cancer
- Supervise a team of 12 student coordinators to annually plan and fundraise \$30,000+ for a summer empowerment camp

**VARSITY TRACK ATHLETE, POMONA COLLEGE** **OCT. 2015 – PRESENT**

**PERFORMANCE VIOLINIST** **AUG. 2013 – PRESENT**