

Jodie Ma

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EDUCATION

California Polytechnic State University, San Luis Obispo, CA
Bachelor of Science in **Computer Science**, GPA: 3.51

Expected Graduation June 2020

Relevant Coursework

Fundamentals of Computer Science I-III (Python, Data Structures & Algorithms, Java), Computer Organization, Systems Programming (C), Statistical Computing with R, Computer Architecture

COMPUTER SCIENCE EXPERIENCE AND PROJECTS

Lockheed Martin Space Systems, Sunnyvale, CA

Systems Engineering Intern

Jun 2018 - Sept 2018

- Streamlined the process of diagnosing issues in the satellite simulation software by creating a C program that extracts and organizes satellite data from large excel files
- Developed another C program that compares two excel files and checks for new data as well as data changes based on user-selected columns and options
- Configured the PIC microcontroller's analog to digital converter and created a GUI for the electrical power system using HTML, CSS, and Javascript

NASA Ames Research Center, Mountain View, CA

Data Analysis Intern

Jun 2017 - Jul 2017

- Worked on the spectrum collision functionality of the NIRCam and MIRI instrument for the James Webb Space Telescope using Python
- Assisted another intern in debugging an error calculation program and making it more efficient
- Modified programs to be more user-friendly to the scientific community by organizing astronomical data and converting two exoplanet spectrum programs from C to Python

Winter Wonderland Game, San Luis Obispo, CA

Dec 2016

- Collaborated with a team of four to develop a Christmas-themed game which involved Santa shooting candy canes at evil snowmen
- Programmed the character movements and designed the game intro using Javascript and HTML

Stanford University School of Medicine, Palo Alto, CA

Bioinformatics Intern

Jun 2015 - Aug 2015

- Utilized proprietary tools to perform statistical analysis on specific transcription factor binding sites that regulate gene expression
- Processed genetic data and analyzed the histone modifications of hematopoiesis and executed multiple

SKILLS

Technical

- *Languages*: C, Python, R, Java, Assembly (LC-3), Javascript (processing.js)
- *Other*: UNIX, Vim, Git

Foreign Languages

- Mandarin Chinese (fluent), French (intermediate)

OTHER EXPERIENCE

Women Involved in Software and Hardware, San Luis Obispo, CA

Tech Officer, Tech Director

May 2017 - Present

- Plan technical workshops such as microcontrollers, website building, and quarterly projects

The Tech Museum of Innovation, San Jose, CA

Robotics Volunteer

Oct 2014 - May 2016

- Interacted with guests by controlling and speaking through a robot