# **Jodie Ma**

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#### **EDUCATION**

California Polytechnic State University, San Luis Obispo, CA

Expected Graduation June 2020

Bachelor of Science in Computer Science, GPA: 3.58

# **Relevant Coursework**

Fundamentals of Computer Science I-III (Python, Data Structures & Algorithms, Java), Computer Organization (Assembly & C), Statistical Methods for Engineers (R), Systems Programming (C)

#### **COMPUTER SCIENCE EXPERIENCE AND PROJECTS**

# 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

December 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, Stanford, 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 tests to ensure the accuracy of the data

#### **SKILLS**

#### **Technical**

- Languages: Python, Java, C, Assembly (LC-3), HTML, CSS, Javascript (processing.js)
- Other: Linux Terminal, Vim, Git

#### **Foreign Languages**

• Mandarin Chinese (fluent), French (intermediate)

#### **OTHER EXPERIENCE**

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

Tech Officer May 2017 - Present

• Plan technical events such as virtual reality, microcontroller workshop, and quarterly projects

**COD3X Club (Computer Science Club)**, Piedmont Hills High School, San Jose, CA

Co-President Aug 2015 - May 2016

- Organized activities and updated the club website with upcoming coding events in the Bay Area
- Developed proper coding instructions to teach the basics of programming after school

# The Tech Museum of Innovation, San Jose, CA

Robotics Volunteer Oct 2014 - May 2016

- Interacted with guests by controlling and speaking through a robot
- Educated museum visitors on robotics and technology