

# Sean S. Wallace

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## Education

**California Polytechnic State University, San Luis Obispo**

Class Level: Sophomore

Bachelor of Science in **Computer Engineering**, June 2019

Overall GPA: **3.17**

Emphasis in **Software Engineering**

**Related Coursework:** Computer Programming Series, Digital Design, Computer Design & Assembly Language Programming, Systems Programming (currently enrolled), Electrical Circuit Analysis (I, II), Calculus Series

## Skills

*Programming Languages:* Proficient knowledge of C, Java, and Python

*Development Tools:* Familiar with git, vim, Eclipse, Bash, UNIX, and ROS

*Hardware Development:* Exposure to VHDL, Xilinx, Eagle

*Web Development:* Basic knowledge of HTML, CSS, and AngularJS

*Operating Systems:* Comfortable using Ubuntu, OSX, Windows

## Project Highlights

### Autonomous Golf Cart

*Ongoing project with the Cal Poly Robotics Club*

September 2016 – Present

Design software with the ROS framework, write firmware for a board using an STM32 chip

- Python, C, ROS

### RAT MCU

*Implementation of a basic microprocessor design in VHDL*

March 2016

Targets the BASYS 3 FPGA using the Vivado Design Suite

- VHDL, Digital Design

### Chess AI

*Rudimentary chess AI that plays a weaker version of itself*

January 2016

Designed using a mailbox board representation and a branch traversal algorithm

- Java, Object-oriented programming

### Ninja Fighter RPG

*Simple top-down action-based RPG*

September 2015

Created in the Greenfoot IDE

- Java, Object-oriented programming, game design

## Extracurricular Activities

### Cal Poly Robotics

Software Team Member

San Luis Obispo, CA

September 2016 – Present

- Wrote collision detection software in python using the ROS framework
- Implemented an RC control system for the autonomous golf cart project

### ACM-ICPC International Collegiate Programming Contest

Annual Contestant

San Luis Obispo, CA

December 2016 – Present

- Member of Cal Poly Team 4

### Mililani FIRST Robotics

Assistant Project Manager

Mililani, HI

August 2014 – May 2015

- C++, technical documentation

- Scrum project management methodology

## Honors

- Hawaii Rotary Club Scholarship
- Dean's Honor's List (Fall 2015, Fall 2016)