

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

San Luis Obispo, CA

Software Team Member

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

San Luis Obispo, CA

Annual Contestant

December 2016 – Present

- Member of Cal Poly Team 4

Mililani FIRST Robotics

Mililani, HI

Assistant Project Manager

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)