

Ryan White

Barstow, CA • Ryan@RyanSW.com

EDUCATION

California State Polytechnic University, Pomona

Expected Graduation: **May 2020**

Bachelors of Science in Computer Engineering, Minor in Entrepreneurship

Major GPA: 3.80

Cumulative GPA: 3.61

President's List

2 Years

Dean's List — College of Engineering

5 Terms

TECHNICAL SKILLS

Listed in descending levels of understanding

Languages C, C++, Verilog, HTML, CSS, JavaScript, Java, Python

Platforms ARM Microcontrollers, AVR Microcontrollers, PIC Microcontrollers, FPGAs, NodeJS, Google Firebase, Amazon Web Services, Windows, Linux, SageMath, React

Design Software Altium Designer, KiCAD, OrCAD, Autodesk Fusion 360

Coursework Microprocessor Programming, Graphical Interface Programming, FPGA Programming and Design, Nodal Circuit Analysis, Phasor and A/C Circuit Analysis, Circuit Design, Data Structures and Algorithms

WORK EXPERIENCE

Jet Propulsion Laboratory — *Electronics Intern*

June 2019 – Present

- ❖ Working on embedded software for the Polar Radiant Energy in the Far InfraRed Experiment (PREFIRE) CubeSat
- ❖ Wrote embedded drivers for interfacing with hardware SPI and UART modules on the Vorago VA10820
- ❖ Wrote a C library for building, sending, receiving, and decoding CCSDS Space Protocol Packets in an ARM mcu
- ❖ Writing a Python library for dynamically encoding, decoding, and handling CCSDS Space Protocol Packets
- ❖ Assisting with the development of an ARM based stepper motor driver for optics on the PREFIRE CubeSat

Cal Poly Pomona IT Client Services — *Desktop Support Assistant*

July 2017 – June 2019

- ❖ Assisted desktop support technicians in maintaining state equipment and working with users to resolve issues.
- ❖ Managed a support incident and request ticket queue and worked independently to resolve issues
- ❖ Lead and supported the implementation of Teamviewer for providing remote assistance to our users

Cal Poly Pomona IT Client Services — *Classroom Technology Assistant*

February 2017 – July 2017

- ❖ Supported media and teaching technology in classrooms across the entire campus
- ❖ Assisted IT staff with setup and installation of multimedia equipment in classrooms

Barstow Community College Performing Arts Center — *Sound Tech., Lighting Tech.*

January 2015 – July 2015

- ❖ Primary sound technician for all purchased venue use
- ❖ Provided assistance to college for internal venue use for college events and drama club performances

LEADERSHIP AND PROJECTS

Cal Poly Pomona Amateur Radio Club — *Club Treasurer, Club President*

May 2018 – Present

- ❖ Develop financial plans and manage budgets for campus radio club
- ❖ Work with members to build projects around various radio technologies we are interested in learning about
- ❖ Set goals and objectives for the club and its members

Project Lite — *Software and Hardware Developer*

September 2018 – May 2019

- ❖ Designed smart, customizable RGB accent lighting panels for residential and commercial installation
- ❖ Implemented a Google Firebase realtime database structure to allow the effects to be changed anywhere
- ❖ Selected as a finalist in the 2019 Cal Poly Pomona Bronco Startup Challenge

Web-Based School Bell Timer — *Developer, Maintainer*

September 2015 – December 2018

- ❖ Designed and built a web-app style synchronized countdown timer to replace old high school bell system
- ❖ Allowed for live, remote updating and scheduling of the bells for changes such as assemblies and early dismissals
- ❖ Maintained the timer for the school after graduation by request since they preferred it to the traditional bell system

References available upon request.