## Education

* University of California, Los Angeles; Los Angeles, California
  + Physics with Statistics minor, anticipated Bachelor of Sciences, 2021

## Skills

* Coding background- Python, C/C++, Bash, VBA, Mathematica, ROS
* Design- Solidworks, AutoCAD Inventor
* Assembly, Integration, and Test
* Requirements verification and validation
* Failure modes analysis
* Viewpoint analysis
* Model-based systems engineering
* Project management and design
* IoT sensor networks
* Prototyping
* CubeSat RF Engineering
* HAM system design

## Major Activity Background and Work Experience

## Bently Nevada

Intern, Systems engineering Team; June 2019-Sept. 2019

* Worked on development of Orbit 60, Torque, and Ranger Pro condition monitoring platforms
* Formulated functional architecture flowdowns and managed requirements
* Developed VBA tools to grade existing requirements for testability and to improve rate of requirement approvals
* Served as primary contact and translator for Chinese-side systems engineering team

## UCLA Smart Grid Energy Research Center (SMERC)

Student Researcher; February 2019-Present

* Reviewed academic and private research for potential development paths
* Researched knowledge transfer system for testing of Machine Learning-driven insurance adjustment
* Developed prototype electric vehicle charger in compliance with ISO 15118 standards
* Designed delivery drone with ROS and CAD tools to support CAEV objectives

**UCLA EPSS**

Student Researcher; November 2019- Present

* Developed and optimized radiometric temperature algorithms using SDR technology and GNURadio
* Modeled Martian surface to predict RIMFAX data prior to instrument deployment on Mars
* Enhanced Perseverance Rover capabilities with instrument capability supplements

## Bruin Spacecraft Group

Lead Communications Engineer, RAPID- URSa mission; June 2019-Present

* Led planning and development of S-band cubesat communications system
* Secured data transmissions in conjunction with Command and Data Handling team
* Assisted systems team in development of system model using MagicDraw and UML

Project Manager, Overseer; June 2018- Present

* Assisted development of component hardware and software systems for high altitude ballooning operations
* Taught Solidworks, RF engineering, systems engineering, and other core skills to inexperienced members
* Improved design for additional mass and flight duration from previous launches
* Led high-level systems management in accordance with technical specifications
* Met with subteam leadership to further refine development goals
* Organized and executed high-level design reviews

Lead Systems Engineer, Reach; Nov. 2017- June 2018

* Led development and management of requirements with project leadership
* Coordinated development of subsystems in accordance with testing and integration procedures