

# Cole Brinsfield

(650) 468 8601  
brinsfield.cole@gmail.com  
linkedin.com/in/colebrinsfield  
colebrinsfield.com

## Education

Expected 2021 **Bachelor of Science, Electrical Engineering**, California Polytechnic State University, San Luis Obispo.

## Experience

2019 **Systems Test Engineering Coop**, AUTOMATION AND CLAIMS, iROBOT.

- Develop internal camera based ground truth system
  - Design automated robot qualifying tests utilizing ground truth system
- Work with iRobot teams to create tests and fixtures around their needs

2019 **Electrical/Firmware Design Intern**, PCH INTERNATIONAL.

- Work with clients to design products based around their needs
  - Product risk analysis
  - Product prototyping
  - Schematic capture and board layout
  - Firmware design
- Created internal device agnostic testing suite

2018 **Engineering Intern**, NASA ARC, INTELLIGENT SYSTEMS DIVISION.

- Worked with Astrobees Freeflyer Robot
- Developed Astrobees Microbial Sampling Payload
  - Worked with Microbial Sampling mission to design and build a functional prototype of Air Sampling payload for future missions from requirements in ten weeks
- Developed Astrobees Port Testing Payload
  - Worked with Astrobees Integration and Testing team to create payload to test Astrobees payload expansion ports

2017 **Hardware Engineering Intern**, AFERO, INC.

- Uncovered a critical firmware bug while developing Modulo 2 IOT board, saving a potential outage from occurring in production
- Worked with Customer Solutions to develop IOT prototypes based upon potential customer specifications.
- Led redesign of in-house prototyping lab

2013–2017 **Captain**, FIRST ROBOTICS COMPETITION.

## Awards

2019 Runner Up, SLO Hacks

2017 Innovation in Control, Silicon Valley Regional (FIRST Robotics competition)

2017 Innovation in Control, Ventura Regional (FIRST Robotics competition)

## Personal Projects

ROS Based Robot	Created a small ROS robot capable of autonomous SLAM movement, face tracking with computer vision, and complex data visualization	Biometric Lock	Created a system which would unlock dorm room with computer vision detection of an approved face
LED Matrix	Created an LED matrix out of 3600 LEDs, utilizes custom protocol to display video	Arcade Cabinet	Created a full arcade cabinet with authentic controls and games

## Skills

Programming

- Python
- C#
- C++
- Java
- SystemVerilog

Manufacturing

- Additive Manufacturing
- Electrical Lab Equipment
- Board Rework
- Prototype Manufacturing Equipment