# MARTIN HERRERA

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**PROFESSIONAL SUMMARY**

- Multi-disciplinary mechanical engineer experienced in design and manufacturing as well as programming and embedded electronics
- Experienced working in fast-paced tight timeline environments
- Passionate about automation and human-robot interaction
- Growth oriented seeking to broaden and further develop skillset
- Looking to create technology that sparks delight and working towards a vision

**EDUCATION**

**Cornell University • College of Engineering**

Masters of Engineering • Mechanical Engineering (Robotics Focus) *Dec 2017*

Bachelors of Science • Mechanical Engineering *May 2017*

**WORK EXPERIENCE**

**Manufacturing Design Engineer • Apple Inc** *Feb 2018 - Present*

*Cupertino, CA*

- Responsible for final assembly processes yielding thousands of units daily
- Consulted for vendors on design for manufacturability proposals and process design
- Developed novel processes integrating machine vision and fixture actuation with traditional manufacturing techniques
- Conducted process failure analysis with partial/full factorial design of experiments
- Brought up 3 new vendors and jointly developed a schedule and reliability test suite to ensure readiness for mass production
- Collaborated with mechanical and industrial designers to set product specifications and designed to meet specifications in mass production
- Analyzed first article inspection and capability index data to ensure stable processes

**Research Assistant • Cornell Autonomous Systems Lab** Jun - Aug 2017

*Ithaca, NY*

- Developed IoT solution using Python and ROS to control robot swarms via Bluetooth
- Programmed software system for scale on Linux computers or embedded systems
- Designed and manufactured custom chassis for robot localization in motion capture system using Solidworks and rapid prototyping techniques

***Kessler Fellowship Hardware Intern • Shaper Tools*** *Jun - Aug 2016*

*San Francisco, CA*

- Selected as one of 14 engineers to be fully funded by Cornell University to pursue an immersive start-up internship experience through the Kessler Fellowship
- Designed and integrated a power tool life cycle tester for supplier selection of feeder assemblies of robotic spindle
- Used Solidworks to develop part models and drawings for low volume parts
- Characterized trim router operating specifications for vendor development

***Engineering Team Lead*** **• Cornell Design Build Fly Project Team** *Sep 2013 - May 2017*

*Ithaca, NY*

- Lead design and manufacturing of RC aircraft for yearly international competition
- Used Solidworks and rapid prototyping to design optimized lightweight structures

**SKILLS**

Solidworks • Autodesk Fusion • GD&T • Design for Manufacturing • Rapid Prototyping
Python • MATLAB • JMP • C • ROS • OpenCV • Java • Raspberry Pi • Arduino
Design of Experiments • Electronics Lab Equipment