

Cuyler Crandall

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EDUCATION

CORNELL UNIVERSITY

M.ENG, MECHANICAL ENGINEERING
May 2020 | Ithaca, NY

CORNELL UNIVERSITY

BS, MECHANICAL ENGINEERING
December 2019 | Ithaca, NY
College of Engineering
Magna Cum Laude
Cumulative GPA: 3.81 / 4.0

LINKS

LinkedIn:// [cuylercrandall](#)
Portfolio:// [cuylercrandall.com](#)

COURSEWORK

GRADUATE

Multivariable Control Systems
Feedback Control Systems
Embedded OS
Autonomous Mobile Robots
Architectural Robotics

UNDERGRADUATE

Mechanical Synthesis (*Two-Time TA*)
Design for Manufacturing & Assembly
Computer-Aided Manufacturing
Design Failure Mode & Effect Analysis
Spaceflight Mechanics

SKILLS

DESIGN AND ANALYSIS

Professional Use:
Catia 3DX • Catia V5 • SolidWorks
GD&T • MATLAB • \LaTeX
Familiar:
Inventor • NX • Fusion 360 • Python

FABRICATION

Mass Production
Injection Molding • Wireharnesses
Sheet Metal Stamping
Rapid Prototyping
3D Printing (FDM/SLA/SLS/MJF)
Laser Cutting
Metalworking
CNC machining on Haas VMCs
Manual mills & lathes

PROFESSIONAL EXPERIENCE

TESLA | MECHANICAL DESIGN ENGINEER, HIGH VOLTAGE DISTRIBUTION

Aug 2020 - Present | Palo Alto, CA

- Designing automotive HV connectors, devices, and wireharness assemblies
- Carrying concepts from one-off prototypes to high volume production
- Validating parts to IP67, IP69K, and various environmental conditions
- Working cross-functionally with electrical, test, manufacturing, & service teams

AIRBNB | MECHANICAL ENGINEERING INTERN

May 2019 – Aug 2019 | San Francisco, CA

- On the **Backyard** team, prototyped new ways that homes can be built & shared
- Designed for near-term deliverables while retaining long-term adaptability
- Built prototypes for industrial designers to refine user experience

HONEYBEE ROBOTICS | MECHANICAL ENGINEERING INTERN

May 2018 – Aug 2018 | Pasadena, CA

- Designed **sample manipulation system** parts for NASA mission **Dragonfly**
- Released drawings and components to NASA Goddard Space Flight Center
- Constructed cryogenic test fixtures for helium leak testing

ON-CAMPUS EXPERIENCE

CORNELL UNIVERSITY AUTONOMOUS UNDERWATER VEHICLE

Aug 2016 – May 2020 | Ithaca, NY

- Leader of the 12 member mechanical subteam for 2 years
- Organized meetings, design reviews, and training for new members
- Designed and manufactured experimental underwater vector thrust modules

ARCHITECTURAL ROBOTICS LAB | MECHANICAL DESIGNER

Jan 2020 – May 2020 | Ithaca, NY

- Worked under PhD candidate **Deanna Kocher** in Keith Green's lab
- Contributed to **Growbot**, a robot to teach children to care for houseplants

MAE 2250: MECHANICAL SYNTHESIS | UNDERGRAD/GRAD TA

Jan 2019 – May 2020 | Ithaca, NY

- Trained sophomores in CAD, rapid prototyping, and on manual mills and lathes
- Facilitated design reviews & gave pre-production feedback on groups' designs

AWARDS

2020	Best Demo	2020 ACM Interaction Design and Children Conference [1]
2017	1 st , Overall	AUVSI International Robosub Competition
2017	1 st , Tech Report	AUVSI International Robosub Competition

PUBLICATIONS

[1] D. Kocher, C. Crandall, C. Yuan, and K. Green. Growbot: a robotic system to help children grow plants. *2020 ACM Interaction Design and Children Conference: Extended Abstracts (IDC '20)*, 2020.