Katie Bradford

Electrical Engineering Undergraduate

557 Newtown Road
Littleton, MA, 01460

978 413 9293

bradfordkatiee@gmail.com

kebradford.github.io/me

Experience

Summer 2018, Summer 2019

Shaper Tools

Electrical Engineering Intern

Analyzed quotes from several electronics manufacturing services to determine best fit, discussing and negotiating with vendors

Defined system architecture and designed development platform for confidential products

Designed and manufactured electromechanical test fixtures for factory testing, decreasing yield loss and complexity

Fall 2016 - Present

CUAir: Cornell University Unmanned Aerial Systems (cuair.org)

Electrical Subteam

Worked on interdisciplinary team of engineers to design, build, and test unmanned aerial system to compete in search and rescue competition

Designed custom PCBs for catapult control and power regulation

Integrated all bay electronics with carrier board system unifying power, communication, and breakout between modules

Summer 2016, Summer 2017

MITRE Institude, FFRDC

Software Engineering Intern

Reverse engineered CAN bus communication to mitigate risks involving malicious vehicle hacking

Developed Android app to monitor motion and location to assess safety threats

Created tool to extract and index geospatial metadata from aerial imagery to create coverage maps

Summer 2015

Northeastern University

Research Intern

Ran experiments with visual Brain Computer Interfaces, assisting in academic paper providing evidence in support of deterministic modeling for matrix sequencing

Summer 2014

Resin Designs

Electrical Engineering Intern

Designed Arduino system to monitor experiments for chemical engineering RD lab

Education

Cornell University - Ithaca NY

B.S Electrical and Computer Engineering
Spring 2020 - GPA 3.78

M.Eng Electrical and Computer Engineering
Fall 2020

Relevant Coursework

Analog Integrated Circuit Design
Microcontrollers
Microelectronics
Digital Logic and Computer Organization
Human Robotic Interaction

Extracurriculars

Fall 2016 - Present

Cornell Rapid Prototyping Lab

Lab Technician

Assisted research groups and project teams with design and manufacturing

Operated and debugged prototyping machinery; 3D printers, laser cutter, CNC router

Kessler Fellow

Kessler Fellows Program

Engineering entrepreneurship focused program for Cornell Engineering juinors to explore the world of startups

Cornell Maker Club

Events Coordinator

Organized the annual make-athon and skills workshops for Cornell community

Skills

CAD	Altium, Solidworks, Fusion 360
Software	Python, Matlab, Arduino, LaTex
Other	Soldering, 3D printing, laser cutting, technical writing