Rowan Sharman

Mechatronics Engineer

rowansharman.com

Experience

Optimus Ride
Boston, MA

Mechatronics Intern — Summer 2019

- Prototyped, designed, fabricated, analyzed, and documented mechatronic systems for an autonomous vehicle
- Modeled, optimized, and documented sensor blind spots

Arthur G. Russell Company

Olin College Senior Capstone Project — Aug. 2019 to May 2020

Member of a five-person team designing and building a flexible and robust multivariable vibratory test platform to allow AGR to quickly test and optimize vibratory feeding operations.

- Design for usability, manufacturing, and assembly
- Test design, execution, and analysis
- Client and vendor negotiation

Shell TechWorks
Cambridge, MA

Integration and Test Intern — Summer 2018

Worked on several new products in various stages of development, from initial ideation and proof-of-concept prototypes to reliability test design for production-stage products.

Olin College SAE Mini Baja
Needham, MA

Fabrication Lead — 2018 to Current

Baja is a student-run build team that designs and fabricates a rugged off-road vehicle and races it annually in national competitions.

- Participate in design at all levels to facilitate manufacture, maintenance, and repair
- Manage in-house fabrication
- Manage emergency repairs during competition
- Guide new members in design and machine shop operations
- Communicate with subteam leads and co-captains to ensure smooth integration
- Manage and assign tasks for on-time completion
- Served as electrical subteam lead in 2017-18 build season

Rowan's Shop
Gustavus, Alaska

Owner and Mechanic — 2010 to Current

A bicycle repair shop and town handyman, doing everything from carpentry projects to fixing lawnmowers, replacing phone screens, and installing cell signal boosters.

Blind Sailing Research
Needham, MA

Student Researcher — Summer 2017

- Worked on development of new system and updates to an old system which allow blind sailors to participate in match racing competitions.
- Developed a solid state 'tack indicator' which aims to replace hazardous and unreliable mercury switch tack indicators used around the world.
  - Mechanical and electrical design, PCB design, programming
  - Manufactured first 10 units
- Communicated with blind sailors, guides, and dock personnel to identify needs and areas for improvement in setup and use of equipment; provided iterative improvements.

University of Alaska Fairbanks
Glacier Bay, Alaska

Field Research Assistant — Summer 2015, Summer 2016

Worked for two summers on geomorphological research.

- Transported and operated geological research equipment and boats.
- Responsible for safety of team while working in extremely remote, high-stakes, backcountry environments.

Education

Olin College of Engineering

B.S. Candidate 2020

Engineering: Mechatronics

Montana State University

Honors College non-degree 2015-16

General Engineering

Skills

SolidWorks

Fusion 360

Mechanical and Electrical Design, Prototyping, and Manufacturing

Programming Languages

Python

Arduino C

Java

MATLAB

Mathematica

Tools

CNC and Manual Mill

Lathe

CNC Router

MIG Welder

Sheet Metal Fabrication

3D Printer

Laser Cutter

Band Saw

Drill Press

Chop Saw

Table Saw

Soldering Iron

Electronic Test Equipment

Extensive experience with common hand and power tools

Info

rowan@rowansharman.com

Project Portfolio: rowansharman.com

978-235-1405

/in/rowansharman/