GREGORY LUND

Boulder, Colorado | 303-562-6026 | greg.lund@colorado.edu | https://greg-lund.github.io

EDUCATION

University of Colorado, Boulder

May 2021

GPA: 3.90/4.00

Bachelor of Science, Mechanical Engineering

Bachelor of Science, Computer Science

ENGINEERING EXPERIENCE

Automated Robotics and Perception Group

October 2019 - Present

Research Assistant University of Colorado, Boulder

 \cdot Collaborating with a team of students and faculty to design and manufacture systems in support of the DARPA Challenge team, MARBLE

· Designed and prototyped a self-contained linear actuator system for a radio package deployment aboard an autonomous robotics platform

Colorado Space Grant Consortium

October 2018 - Present

RocketSat-X Structures Lead & Systems Engineer

University of Colorado, Boulder

- · Collaborating with a team of students and industry sponsor to design and manufacture a sequencing mechanism for passive solar array deployment
- · Utilizing CAD software to design parts for manufacturability and durability in rocket and space environments
- · Utilizing a variety of machines to manufacture parts including mills, lathes, cnc mills and DMLS 3D printing

Intro to Robotics Project

Fall 2019

Chomp 2.0 (Mock Battlebot)

University of Colorado, Boulder

- · Collaborated with a team of 5 students to build and test an autonomous robotic platform
- · Utilized ROS to communicate between hardware across multiple platforms
- · Implemented basic robotics algorithms from odometry and mapping to background subtraction and blob detection

TECHNICAL STRENGTHS

Computer Languages C/C++, Python, Java, MATLAB, HTML/CSS, SQL, Scala

Tools ROS, Mathematica, LaTex, Bash/Shell Scripting CAD Solidworks(CSWA), Fusion 360(CAD and CAM)

Machines Lathe, Mill, CNC/3D Printing

SELF-DIRECTED PROJECTS See https://greg-lund.github.io

Designed and built a midsize CNC Router

Designed and built two FDM 3D printers

Designed, built and tested a Tesla Turbine

Scratch built model airplanes and quadcopters

Experimented with electronic circuits including digital logic

Experimented with Arduino controllers including an LED based audio visualization system