

GREGORY LUND

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

EDUCATION

University of Colorado, Boulder

Bachelor of Science, Mechanical Engineering

Bachelor of Science, Computer Science

May 2021

GPA: 3.89/4.00

ENGINEERING EXPERIENCE

Automated Robotics and Perception Group

Research Assistant

October 2019 - Present

University of Colorado, Boulder

- 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

RocketSat-X Structures Team & Systems Engineer

October 2018 - Present

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

Chomp 2.0 (Mock Battlebot)

Fall 2019

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

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