GREGORY LUND

Boulder, Colorado | 303-562-6026 | greg.lund@colorado.edu

EDUCATION

University of Colorado, Boulder

May 2021

GPA: 3.87/4.0

Bachelor of Science, Mechanical Engineering

Bachelor of Science, Computer Science

ENGINEERING EXPERIENCE

Automated Robotics and Perception Group

October 2019 - Present

Mechanical Engineer 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 radio package deployment aboard an autonomous robotics platform

Colorado Space Grant Consortium

October 2018 - Present

RocketSat-X Structures Team

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

Software Development Methods Project

August - December 2018

 $Boulder\ Event\ Hub$

University of Colorado, Boulder

- · Collaborated with a team of 5 students to build and deploy a working web application
- · Utilized full stack development to connect a back-end SQL database with an HTML front-end

First Year Engineering Projects

August - December 2017

Automated Braking System for Skateboard Users

University of Colorado, Boulder

- · Collaborated with a team of 4 students to design and fabricate a solution to runaway skateboards
- · Designed and fabricated an Arduino-based controller that deployed a braking system in a matter of milliseconds
- · Utilized CAD software to design and manufacture a functional contact brake pad

TECHNICAL STRENGTHS

Computer LanguagesC/C++, Python, Java, MATLAB, HTML/CSS, SQLToolsVim, Mathematica, LaTex, Bash/Shell ScriptingCADSolidworks(CSWA), Fusion 360(CAD and CAM)

Machines Lathe, Mill, CNC/3D Printing

SELF-DIRECTED PROJECTS

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