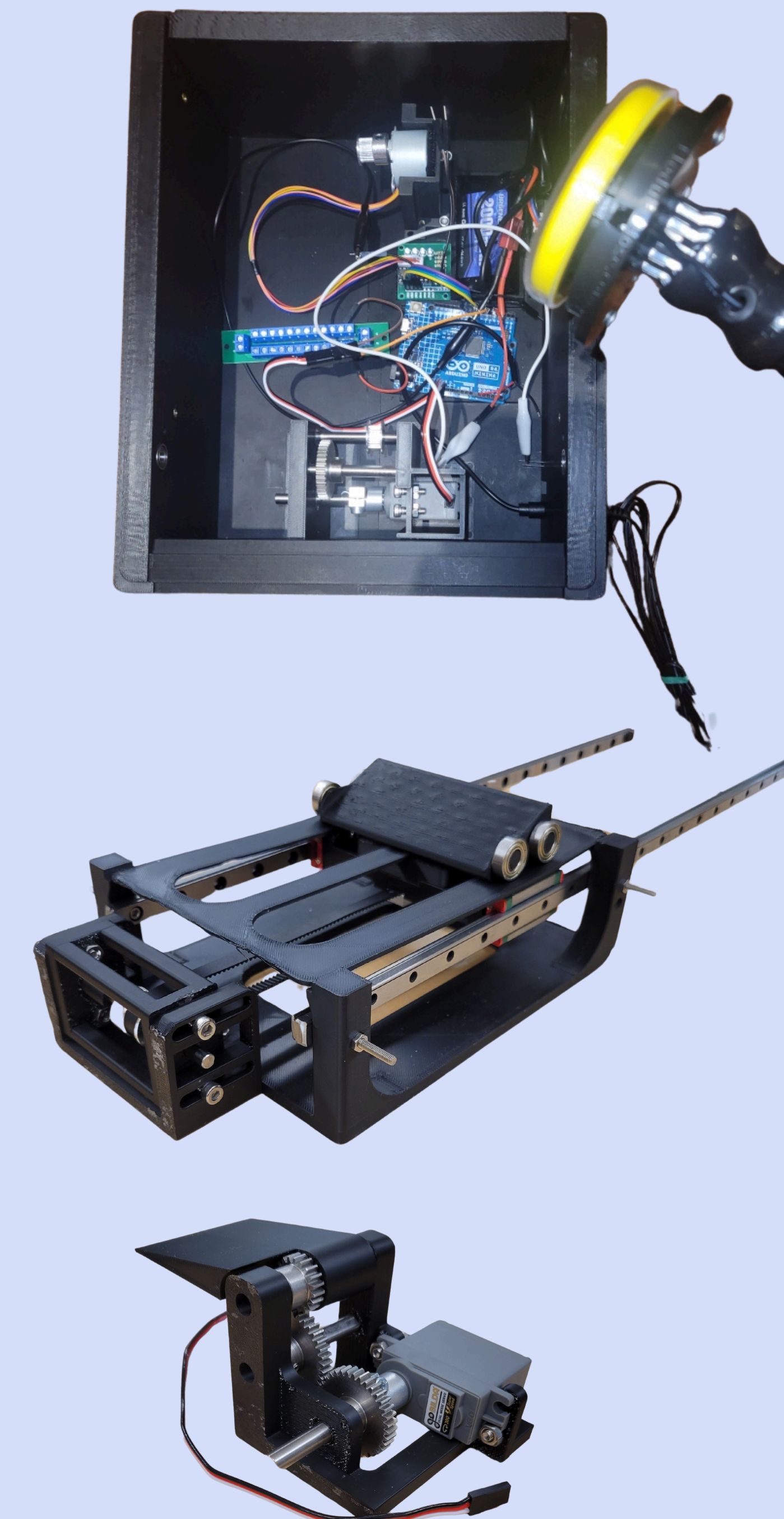


# Dice Roller for Disabled Veterans

## CAD Model



## Internals



## Project Overview

This project required us to build a device that can roll dice or dice like objects. It should be able to load, shake and roll dice without anyone assisting with any of the steps. It should be controlled by head switch that will allow the dice to be shaken and spilled in order to play a multitude of different games.

### Deliverables:

- Design and manufacture a prototype that can roll different types of dice and dice-like objects.
- Design should be able to load, shake, roll, and repeat without assistance.
- Design must use a head switch to allow for different games to be played. Any interface using the mouth is of lower priority.
- Design shall make the user feel they are involved in the process of the “dice rolling” action as much as possible

## Project Sponsor

**Sponsors:** Quality of Life Plus, River Deep Foundation, Craig Hospital of Denver

**Company Description:** Quality of Life Plus is a national nonprofit organization that pairs disabled veterans and first responders (challengers) with university students to engineer ways to improve their quality of life.



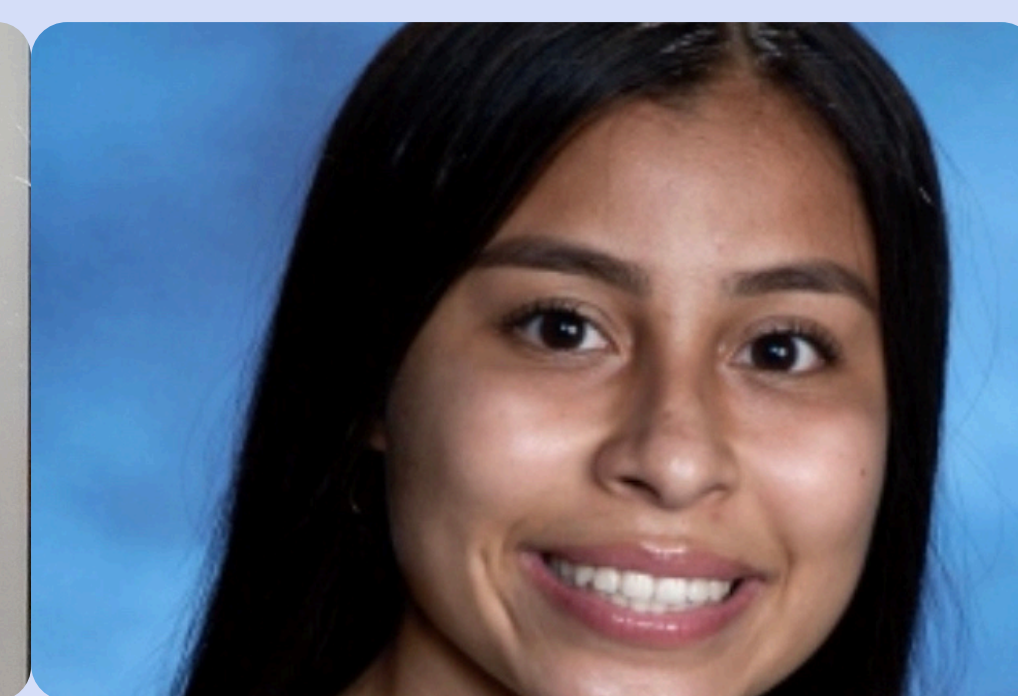
## Meet the Team



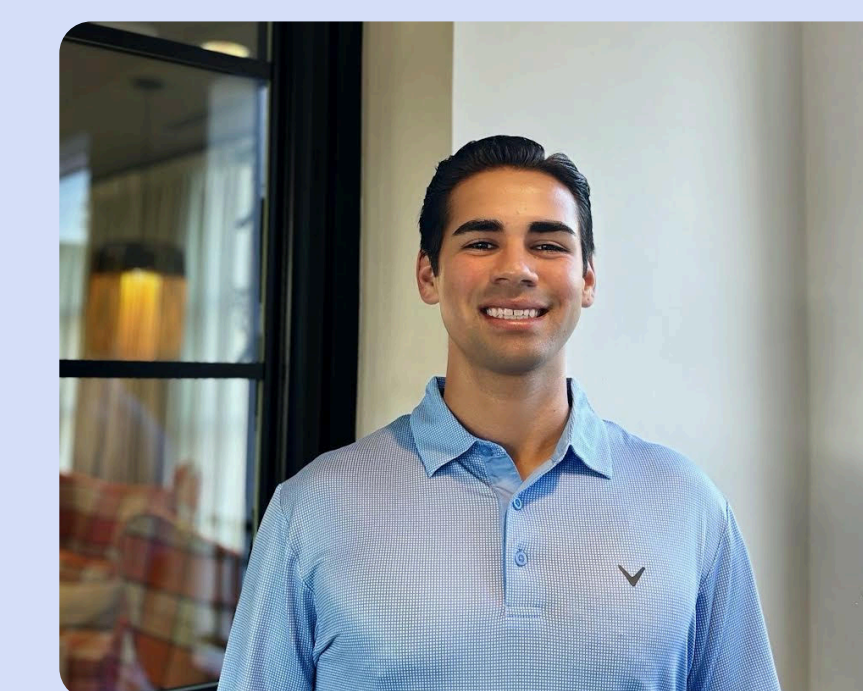
Cayla Ballard



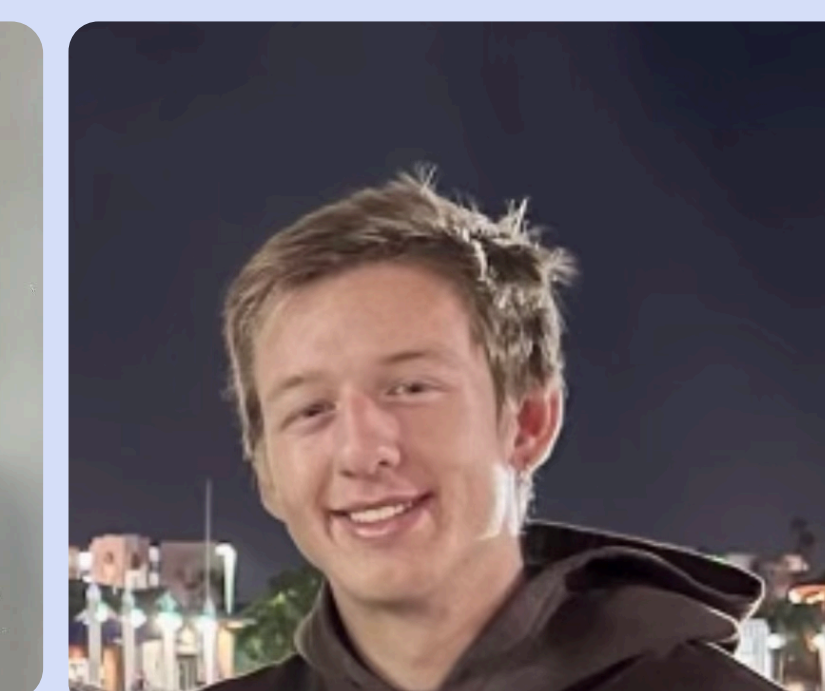
Severen Brown



Jennifer Aguirre



Isaac Rodriguez

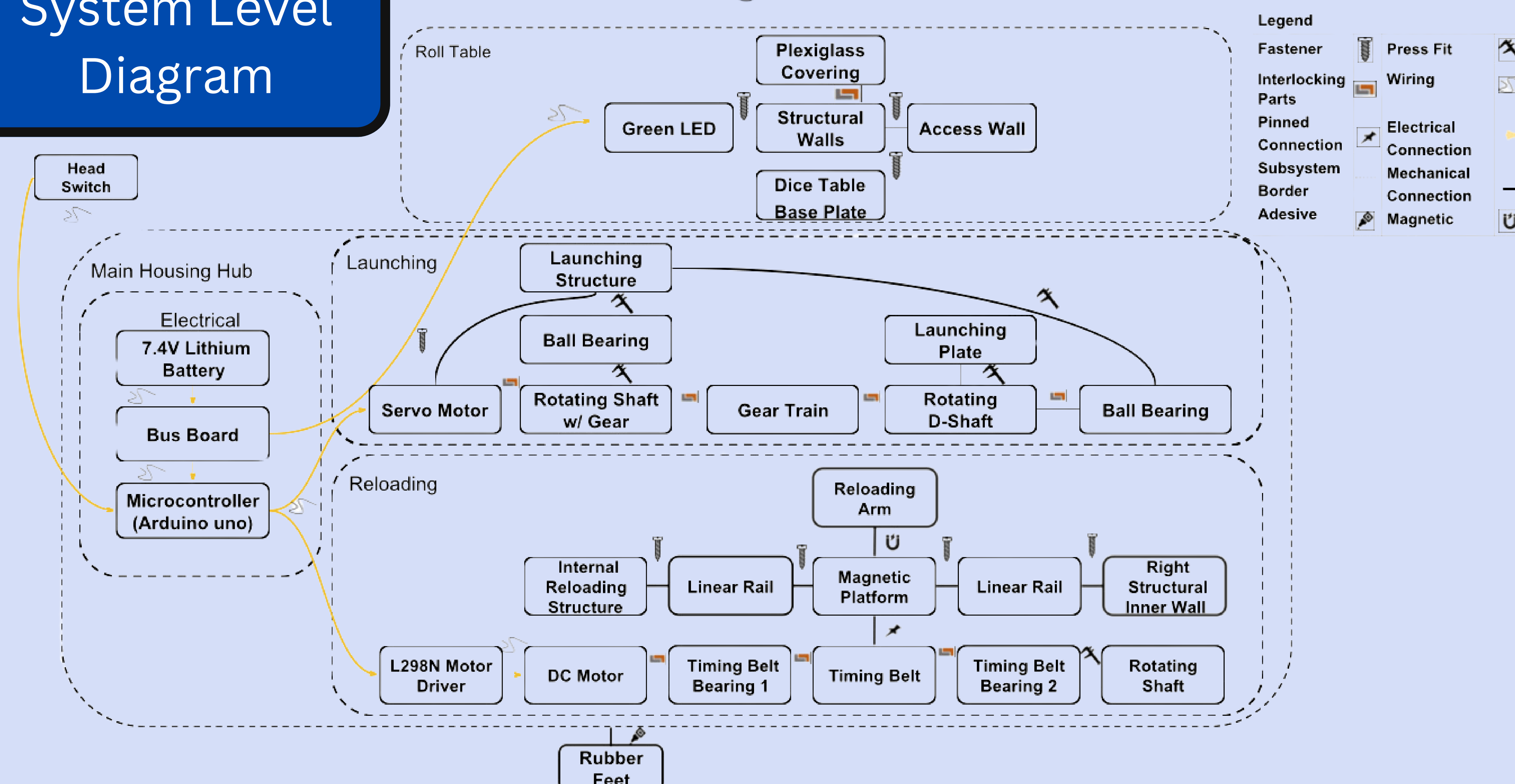


Maxx Pastore



**SDSU**  
San Diego State University

## System Level Diagram



## Acknowledgements

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