



Team 510: Florida Power and Light Fuse Switching Device

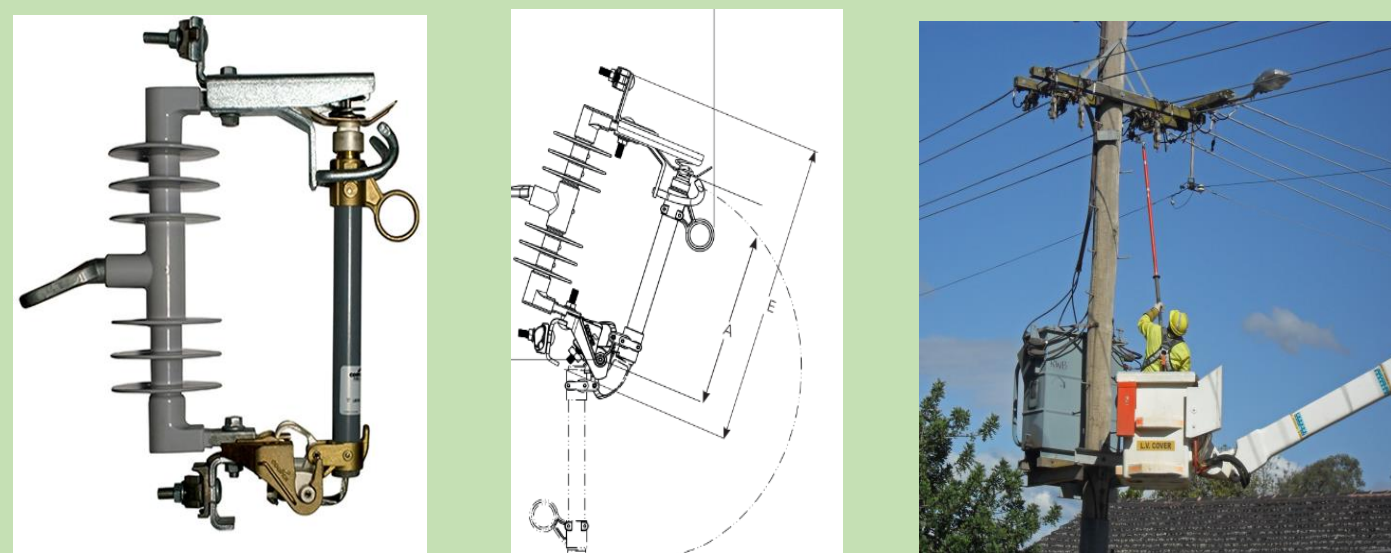
Ebony Bland, Austin Bruen, Davis Goolsby, Emilio Manzo, Garfield Murphy



Project Description

Develop a mechanized remote-control device that can perform fuse switching for restoration.

Fuse Switching Process



Key Goals

The device must be able to perform fuse switching. The device must easily transportable. The device must be easy to operate and user friendly.

Device Camera

The device will come with a camera attached to the robotic arm. This will allow the user to receive real time feedback to the device's commands.



Telescoping Device with Robotic Arm Design

BASE

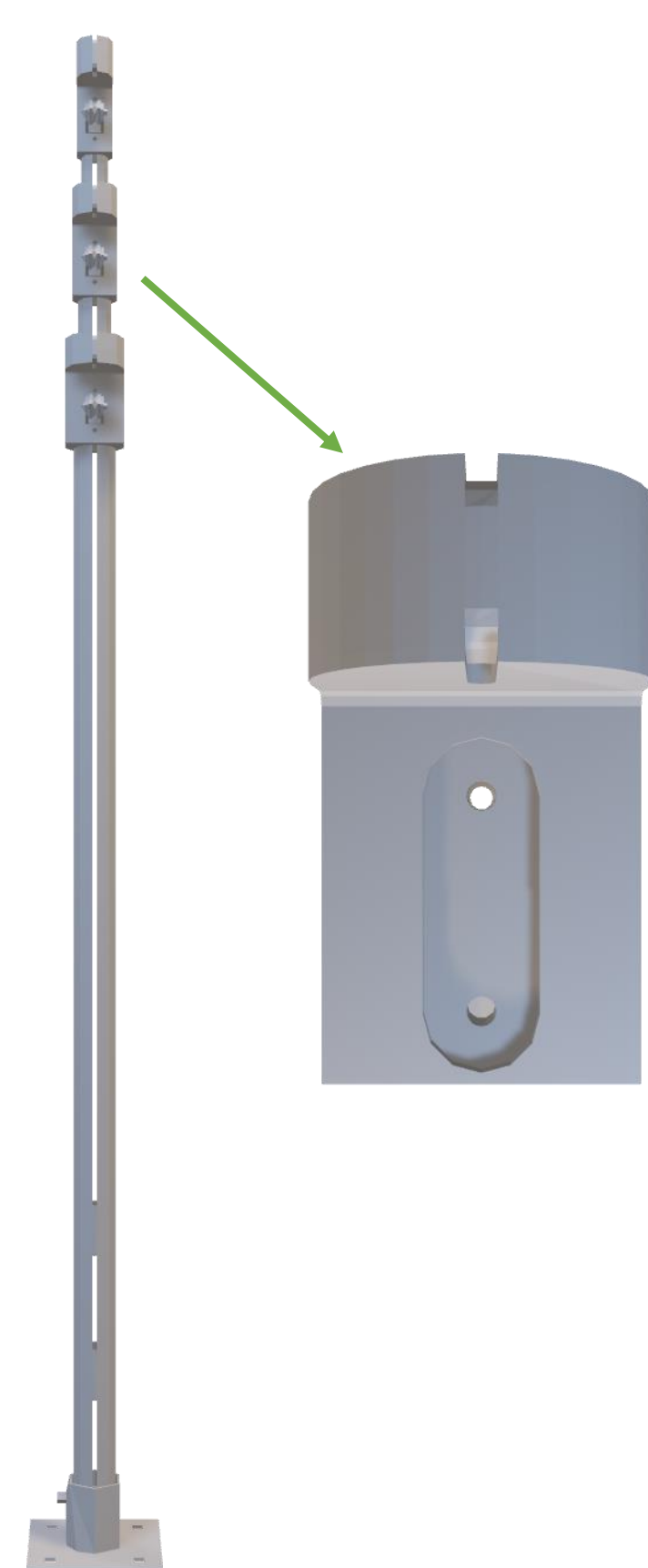
The device will have a base that can be telescoped to the desired height using a motor. The base will be controlled with a remote control, allowing the user to control the device from a safe distance.

ROBOTIC ARM

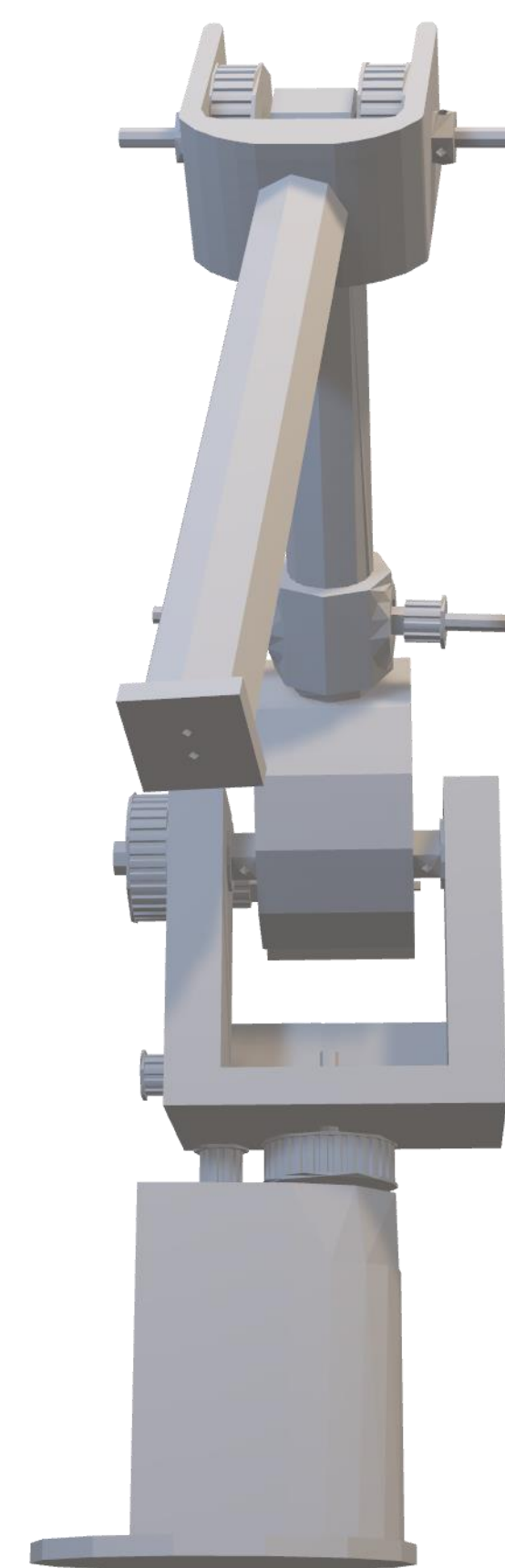
The device will have a robotic arm on top of the base. It will allow the operator to perform fuse switching. The arm will be controlled using a remote control.

SUPPORT

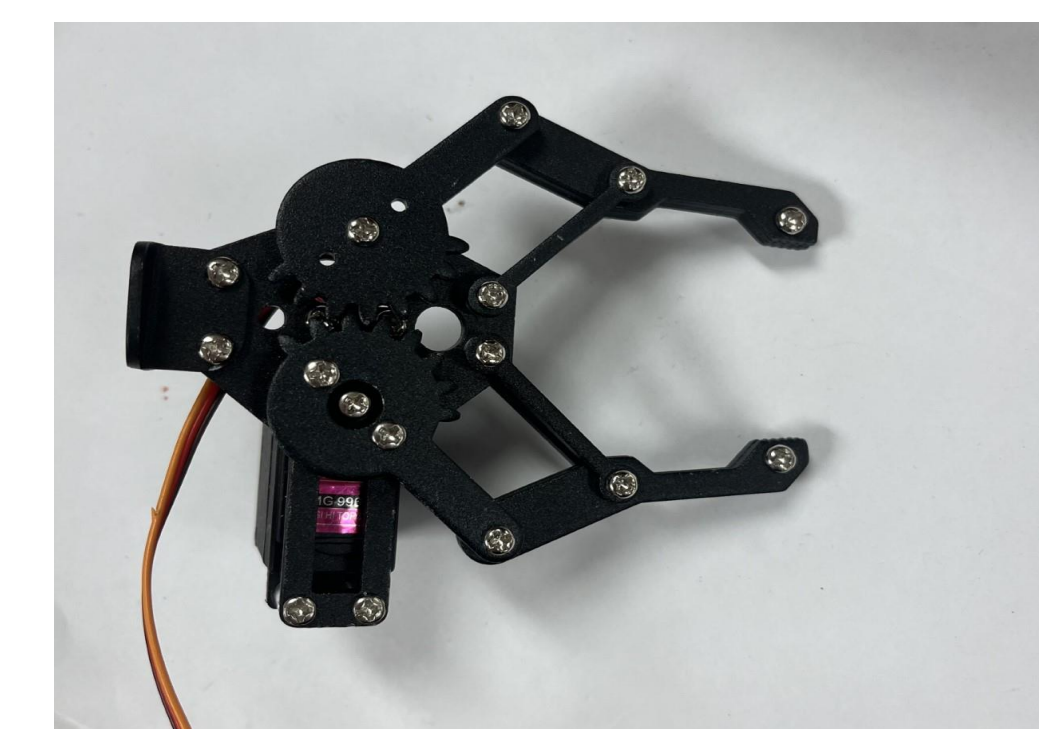
A tripod will support the telescoping base when it is extended. This will provide stability as the device operates, especially in uneven terrain. The base will be mounted on the tripod with the use of a stand.



Base Design

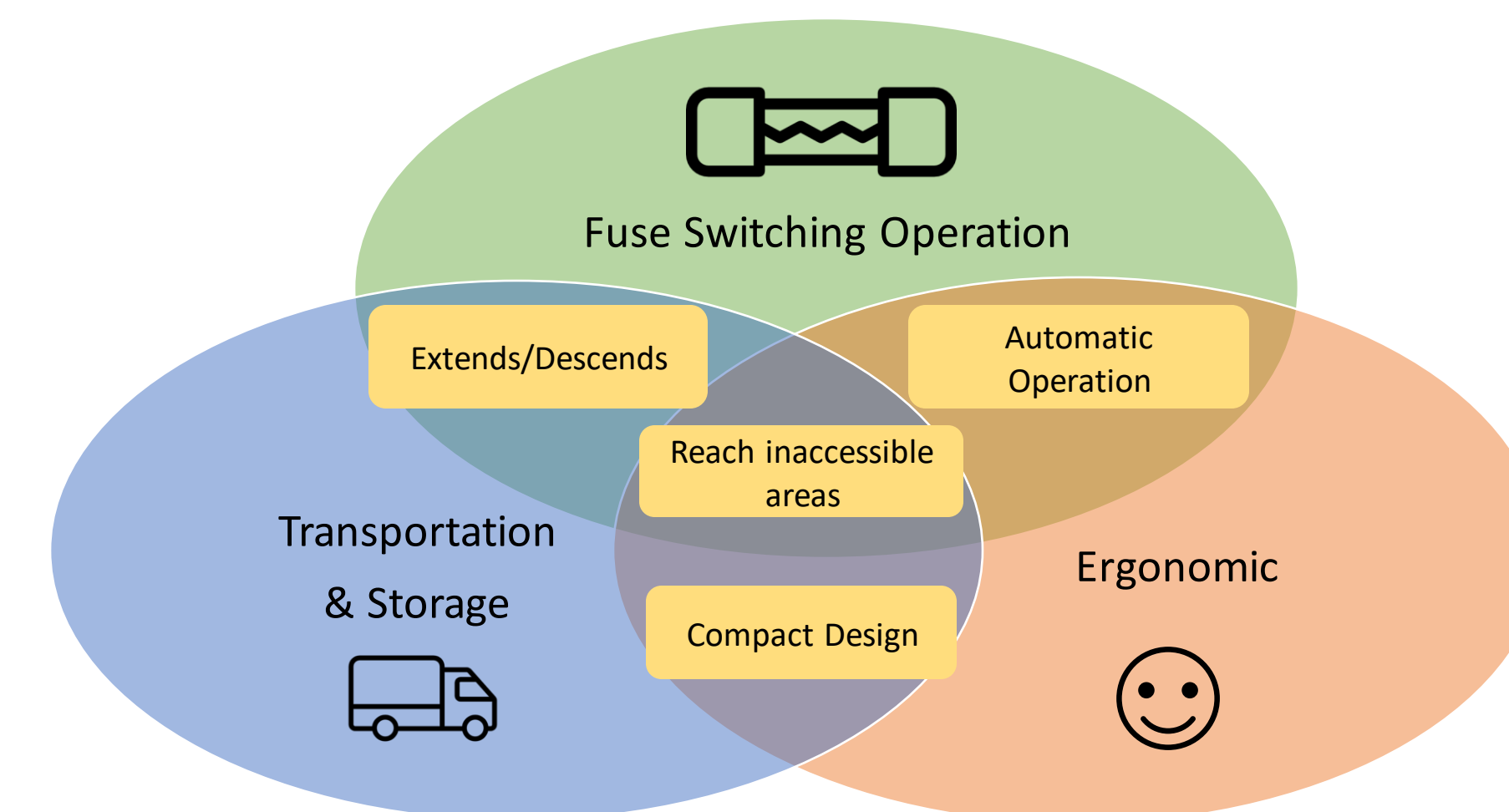


Robotic Arm

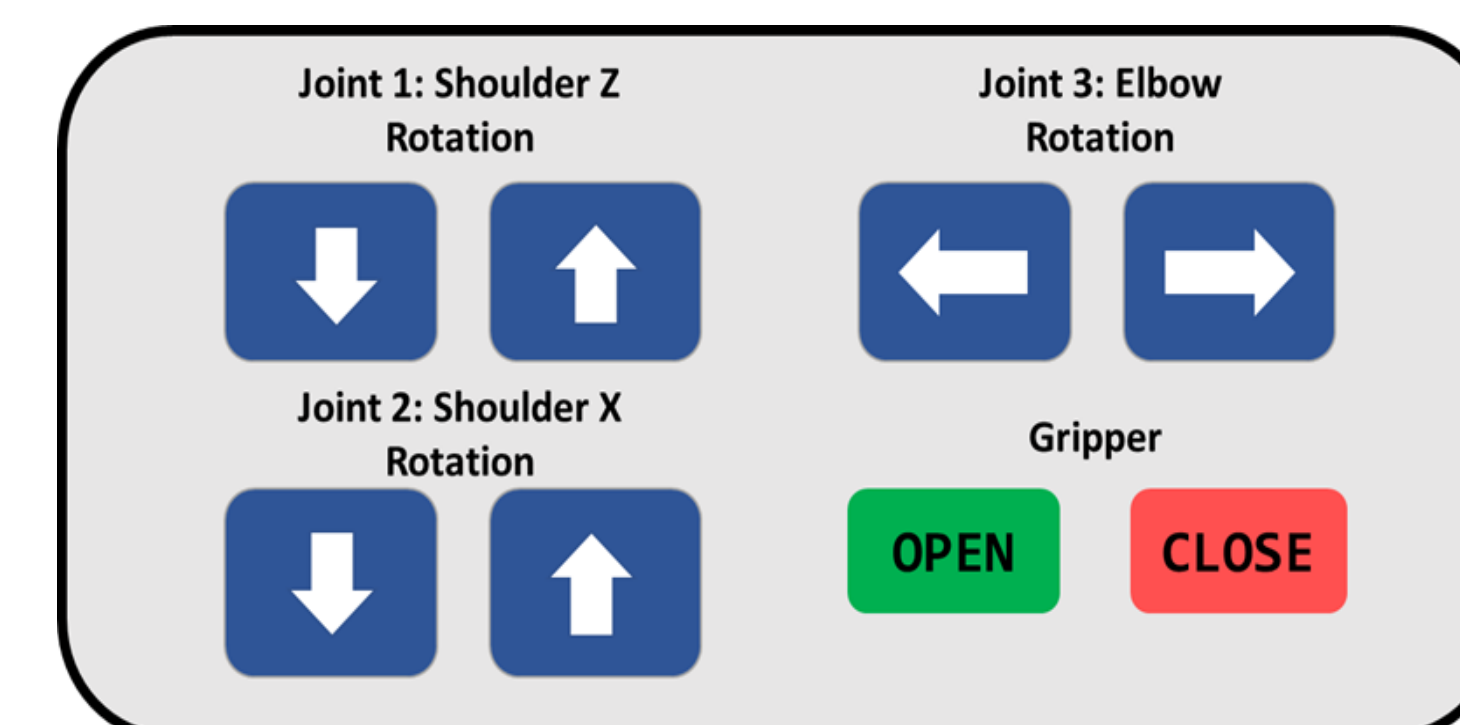


Gripper

Design Functions



Bluetooth App/Controller



Wi-Fi: Internet Control

