



Project Overview

SSG Christopher Walker experienced the loss of both arms, his left leg, and many other injuries from an improvised explosive device in 2012. After recovery, he picked up woodworking but after nine years, his setup still does not accommodate a wheelchair amongst other limitations.

To increase safety, capability, quality, and speed, Team Benchwarmers created: a height-adjustable bench that allows sitting and standing, shelving for better tool access, a crane lift to move material, and an arch arm to safely manage cords.

Team Roster



Nyah Brooks she/her
Safety & Validation Engineer



Courtney Earley she/her
Scheduling & Marketing Specialist



Elias Enguancho he/him
Team Lead & Quality Engineer

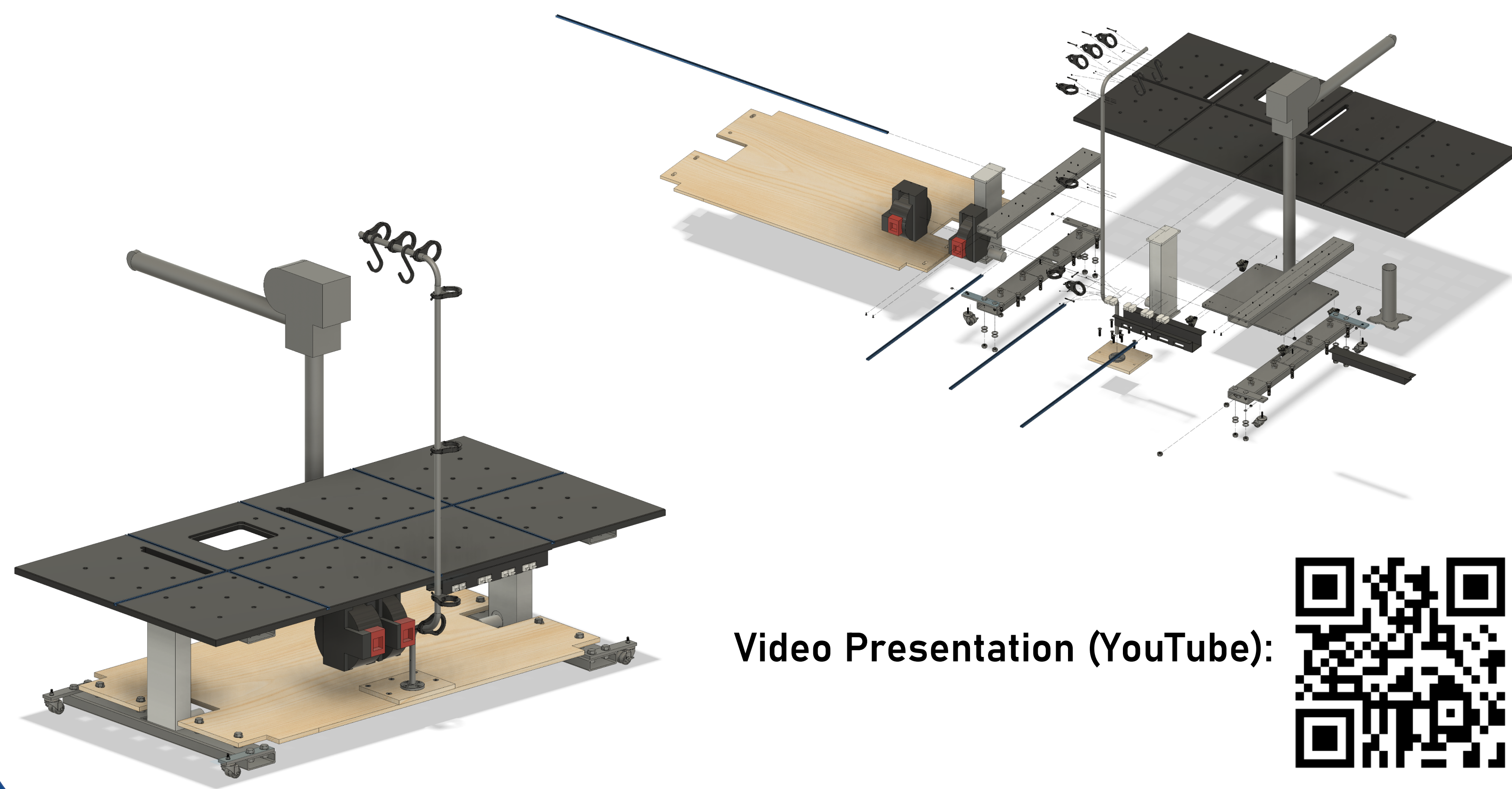


Samuel Griffith he/him
Lead Design Engineer



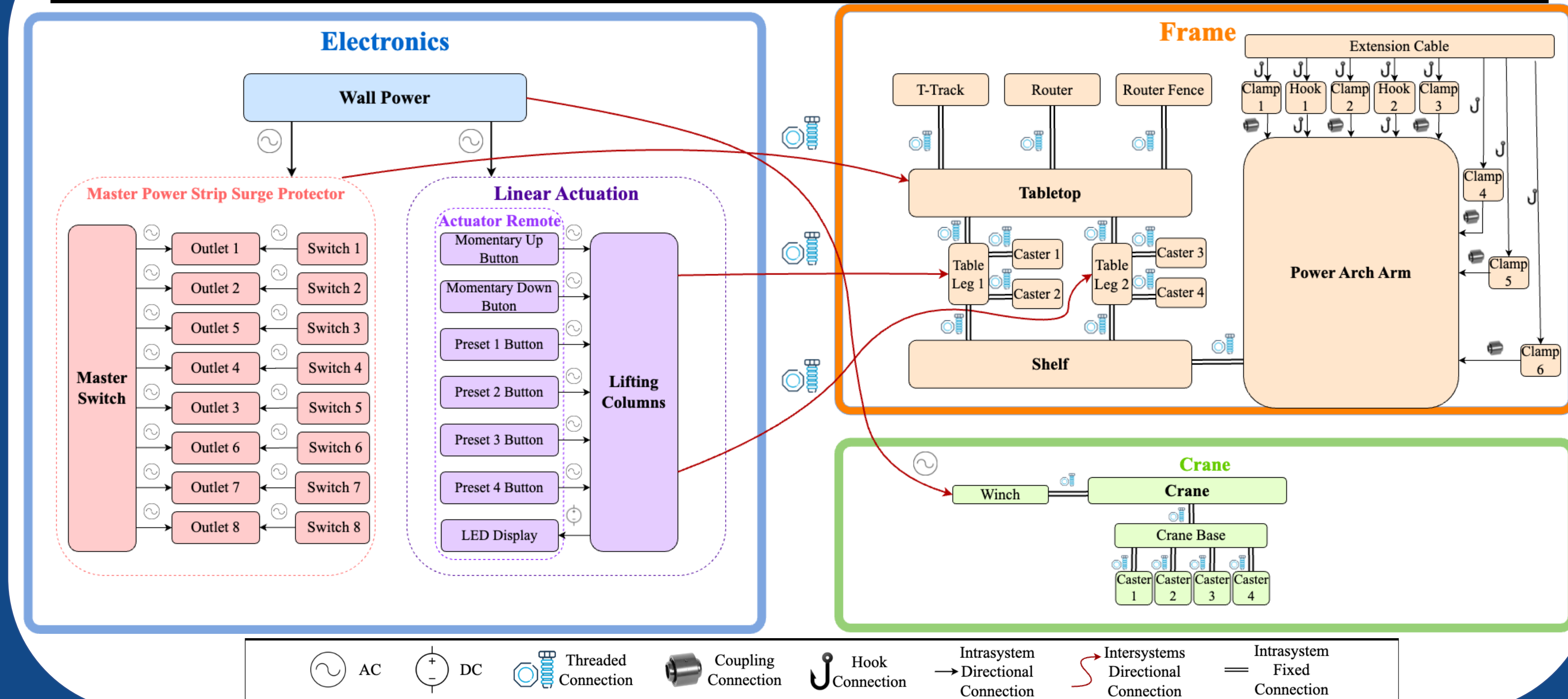
Cody Pannelather he/him
Manufacturing Engineer

CAD Models

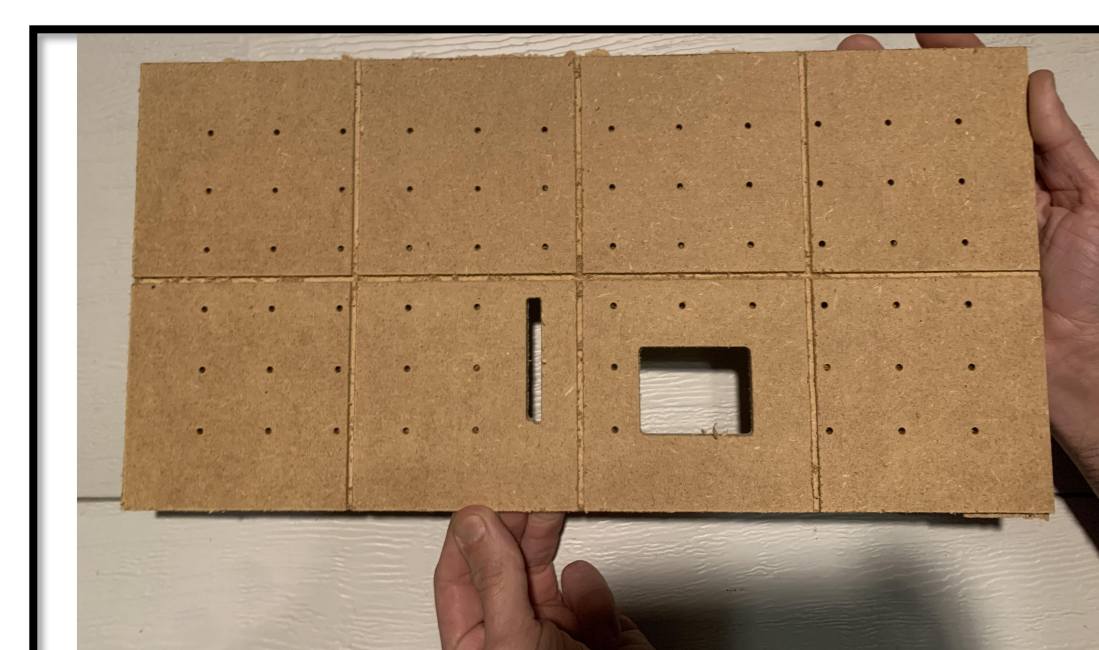


Video Presentation (YouTube):

System Level Diagram



Fabrication and Testing



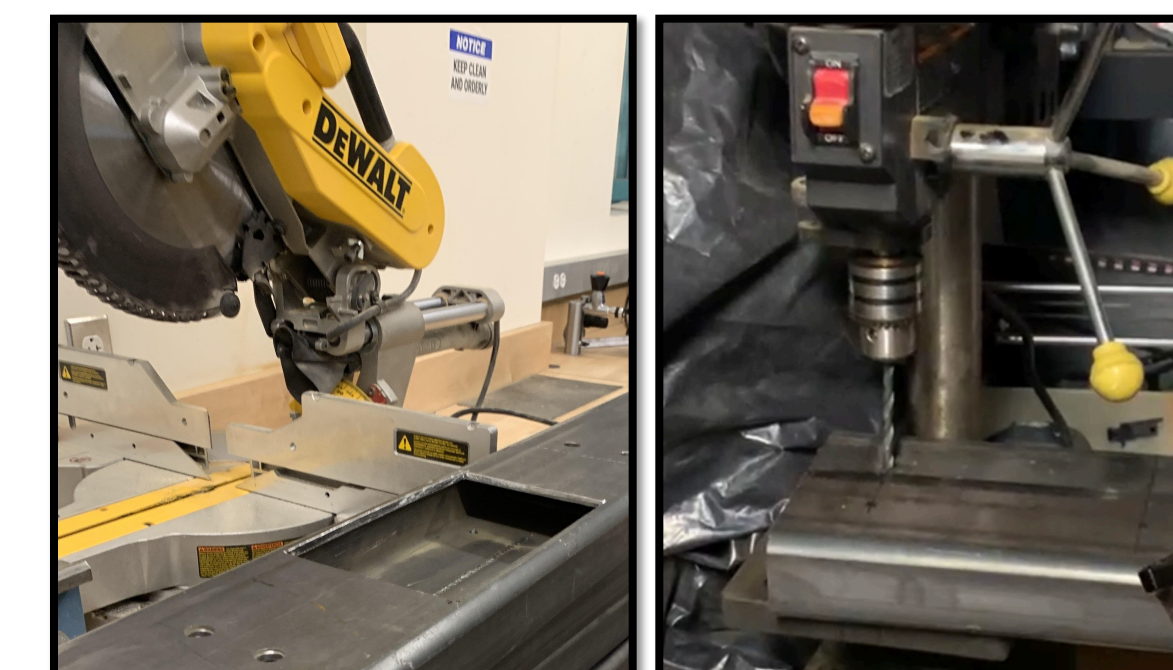
Mini Tabletop CNC Prototype



To-Scale Plywood Tabletop CNC Prototype



Fabrication of Crane Base



Milling Table Legs

Acknowledgements

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