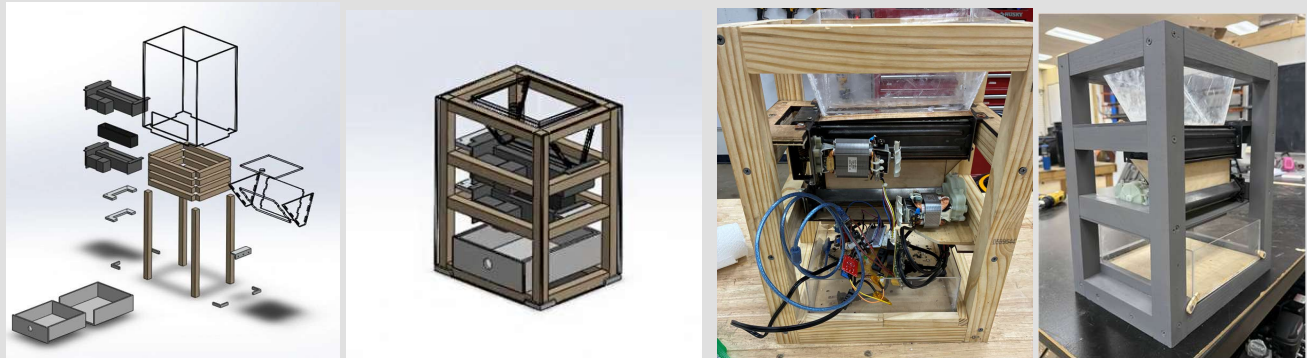


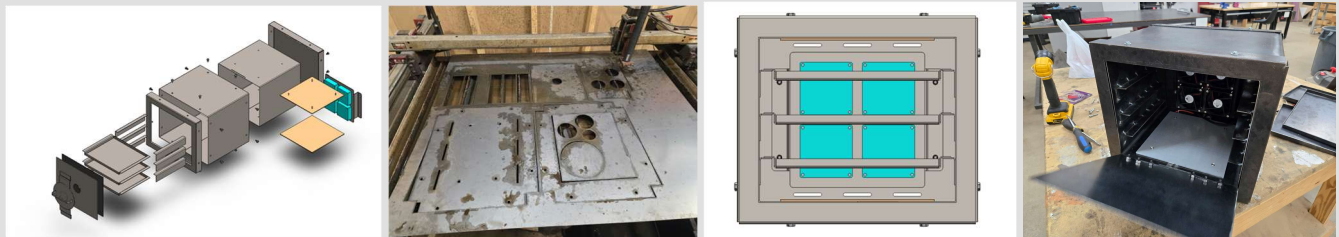
ECOFIL-FILAMENT RECYCLER (ONGOING STARTUP)

Description- Designed a multi-stage filament recycling system (shredder, dehydrator, and extruder) in SolidWorks, ensuring precise component mating and functionality while applying GD&T principles.

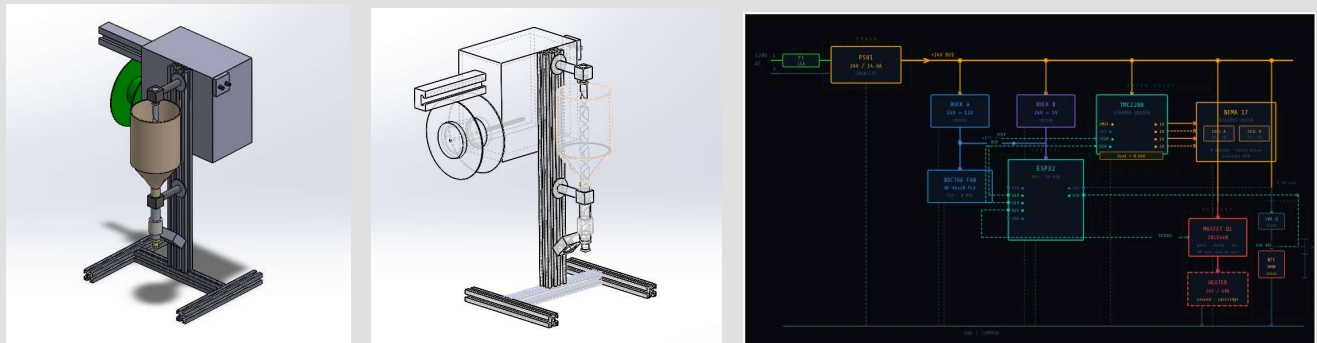
PHASE 1 - PLASTIC SHREDDER



PHASE 2 - FILAMENT DEHYDRATOR



PHASE 3 - FILAMENT EXTRUDER



AUSTIN CREEK SHOW - LARGE-SCALE METAL SCULPTURES

Description- Created initial mockup designs, sample prototypes, and final sculptures utilizing expertise in SolidWorks, fiber lasering, welding, metalworking, and circuitry.

MODELING, PROTOTYPING, MANUFACTURING



ONSITE + ASSEMBLY



FINAL PRODUCT



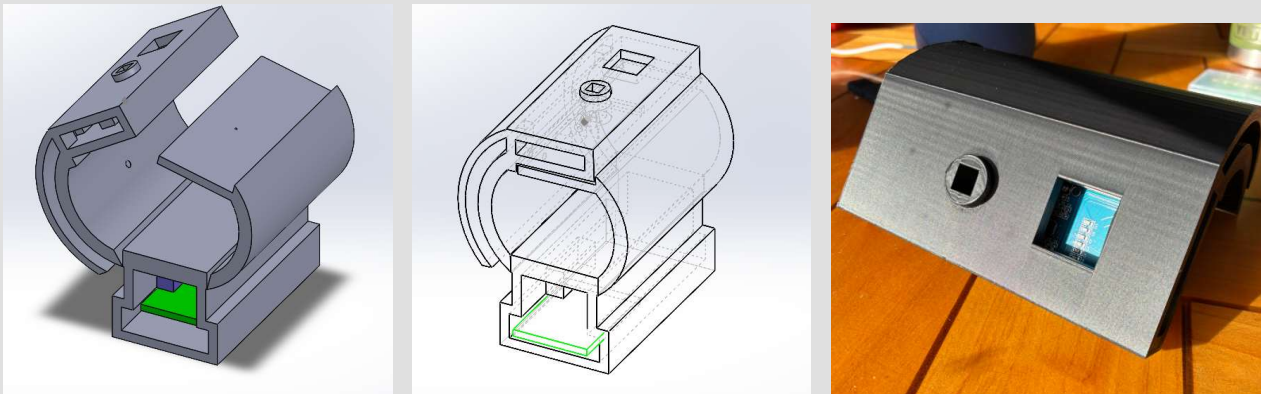
SOCCER SHOTS-TOY/FAMILY GAME PROTOTYPE

Description- Created CAD models (SolidWorks) for a multiplayer toy involving a spring-powered ball launcher and goalie mechanisms.



AUTOMATIC BIKE LOCK PROTOTYPE

Description- Developing an automated locking mechanism integrating Arduino Nano, RFID scanner, solenoids, LEDs, and audio feedback.



GAS TO ELECTRIC TRACTOR CONVERSION PROJECT

Description- Disassembled old gas-powered tractor, welding in new electric transaxle, taking out the engine, and replacing it with a battery system to make the tractor fully electric (small project done as a favor for old robotics teacher, apologies for lack of photos).

