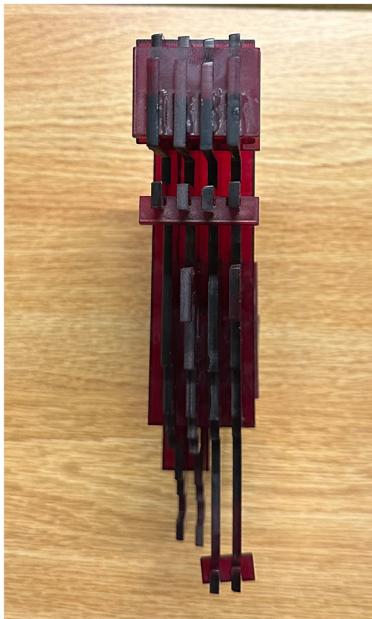


Assignment 8

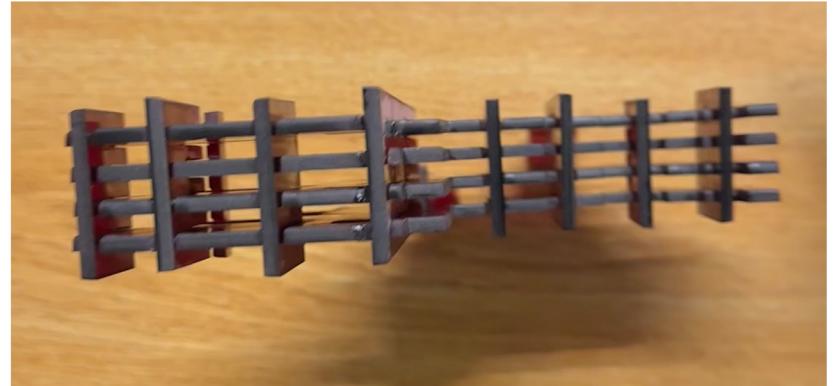
Dylan Fenn
ATLS 3100 Form - Spring 2025

April 7, 2025

Physical Views



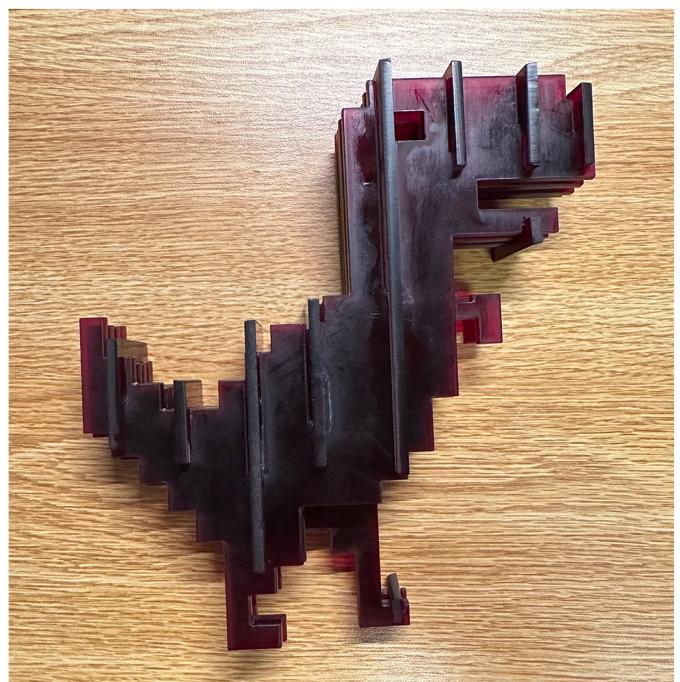
Front



Top

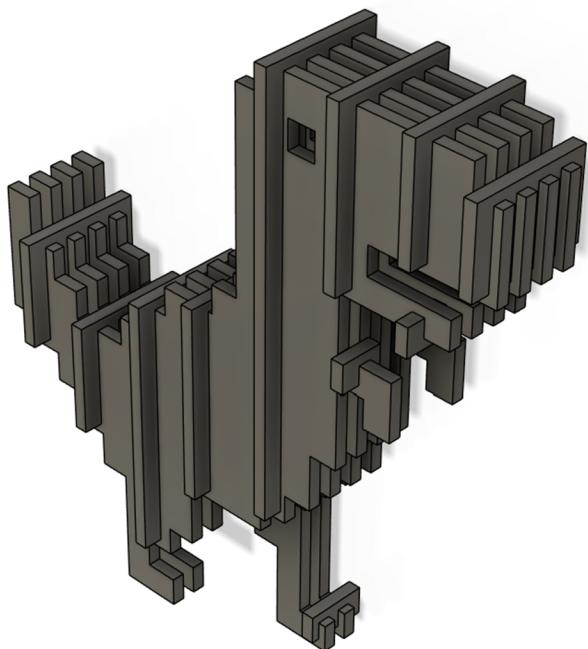


Side Closeup

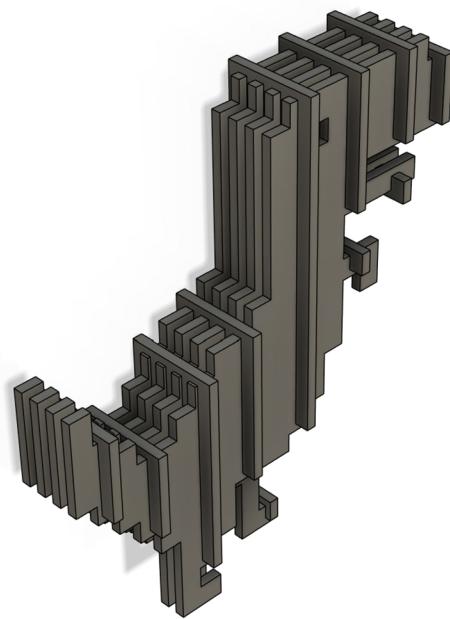


Back Side

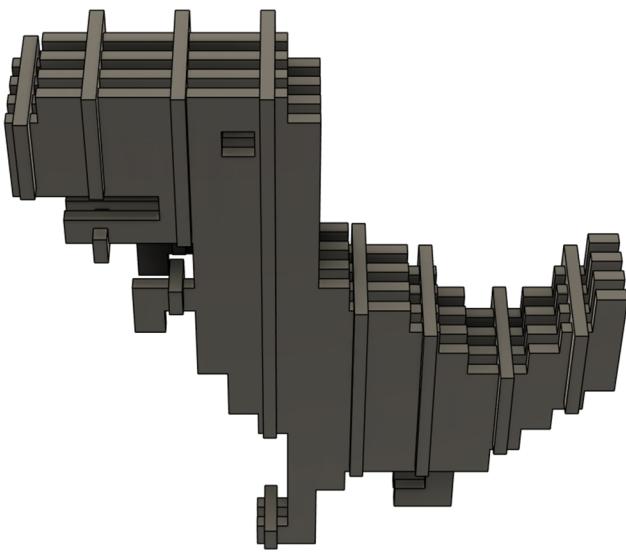
Perspective Views



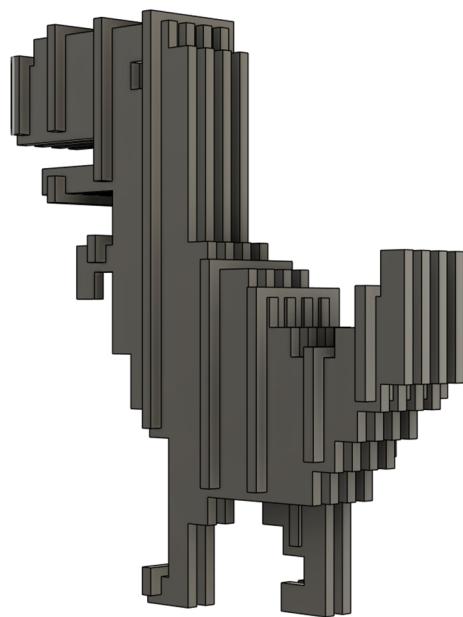
Top Right Front



Top Left Back



Top Middle

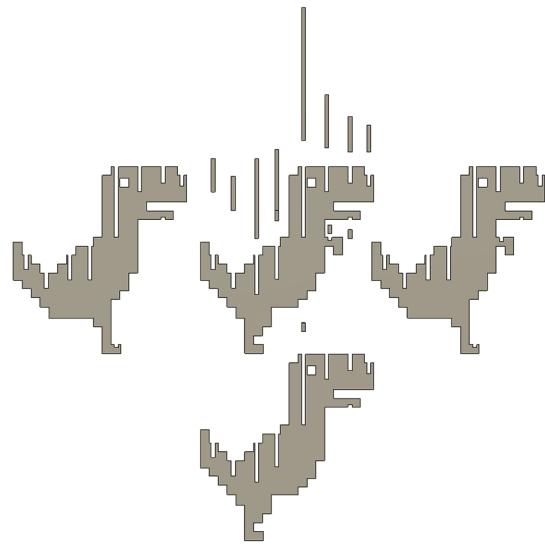


Bottom Right Back

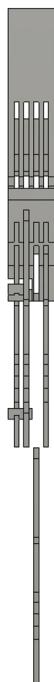
Orthographic Views



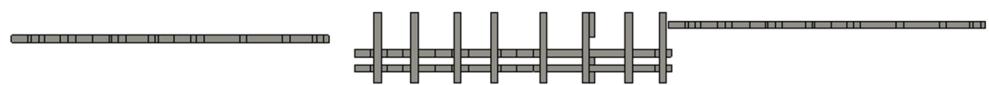
Front Side



Back Side



Front



Top

JOURNAL

Chrome Dinosaur Laser Cut Model Project

1. Finding the Model

To begin this project:

- I started by looking for a model I wanted to use.
 - I went to Printables.com and found a dinosaur from the Chrome offline game.
 - After finding the model, I downloaded the STL file and imported it into Fusion.
-

2. Preparing the Model in Fusion 360

- First, I generated face groups so the model could be constructed into an actual Fusion file.
 - After converting it, I had to manually delete extra faces that had been generated.
-

3. Slicing the Dinosaur into Layers

- I placed a construction plane on the flat side of the dinosaur.
 - Using the rectangular pattern tool, I spaced slicing planes evenly apart.
 - I then used the slice tool to break the model into multiple parts and extruded them to match the thickness of the acrylic I planned to use.
 - After hiding these pieces, I sliced the original dinosaur in the opposite direction to generate additional parts.
 - By repeating this process, I ended up with around 12 new pieces.
-

4. Creating Slots for Assembly

- To determine cross-sections and slot placement:
 - I carefully positioned the pieces.
 - I used the Combine > Cut tool to cut away intersecting material.
 - To allow for easier connection:
 - I extruded each piece slightly.
 - Then performed a reverse cut to create interlocking slots.
-

5. Preparing for Laser Cutting

- With the model complete:
 - I went to the Manufacture tab.
 - Used the Arrange tool to lay the parts flat on a surface.
 - Projected each component onto a sketch and downloaded a DXF file.
-

6. Final Adjustments in Illustrator

- I imported the DXF file into Adobe Illustrator.
 - Adjusted the line settings:
 - Set line thickness to 0.01 pt.
 - Changed line color to red so the laser cutter would recognize them.
-

7. Laser Cutting at BTU

- I headed to the BTU lab to laser cut all my parts.
- During the process:
 - I had to make a few adjustments.
 - Offset some of the sketches to ensure the pieces fit together better.

ALL DONE!