

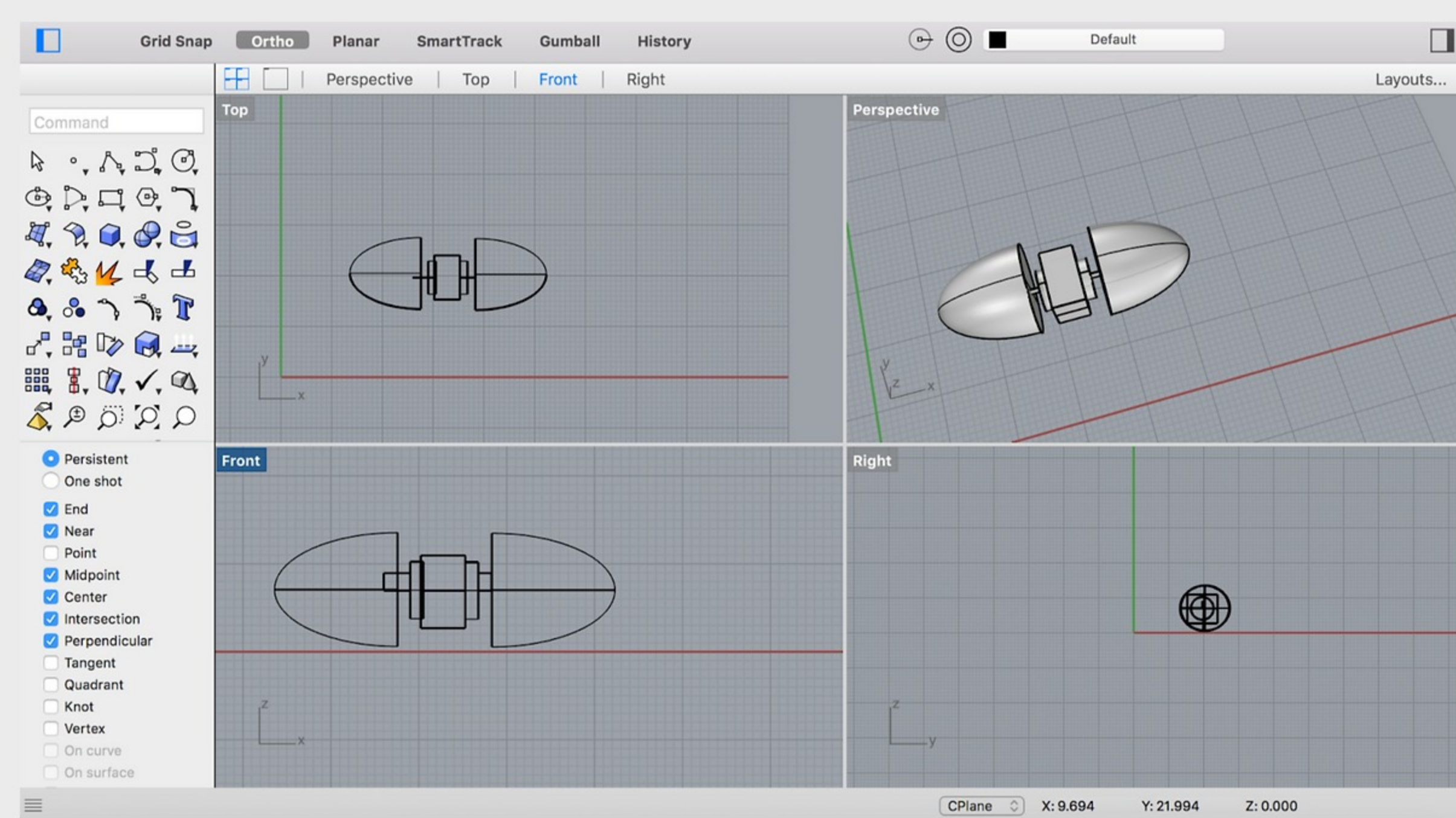
Machining & Robotics

In the realm of product design, I have experience with several programs, such as Onshape, Fusion 360, Rhinoceros, and Unity. In machining and product creation, I have experience in work with mills, lathes, laser cutters, 3DP, etc. Below are some examples of my work.

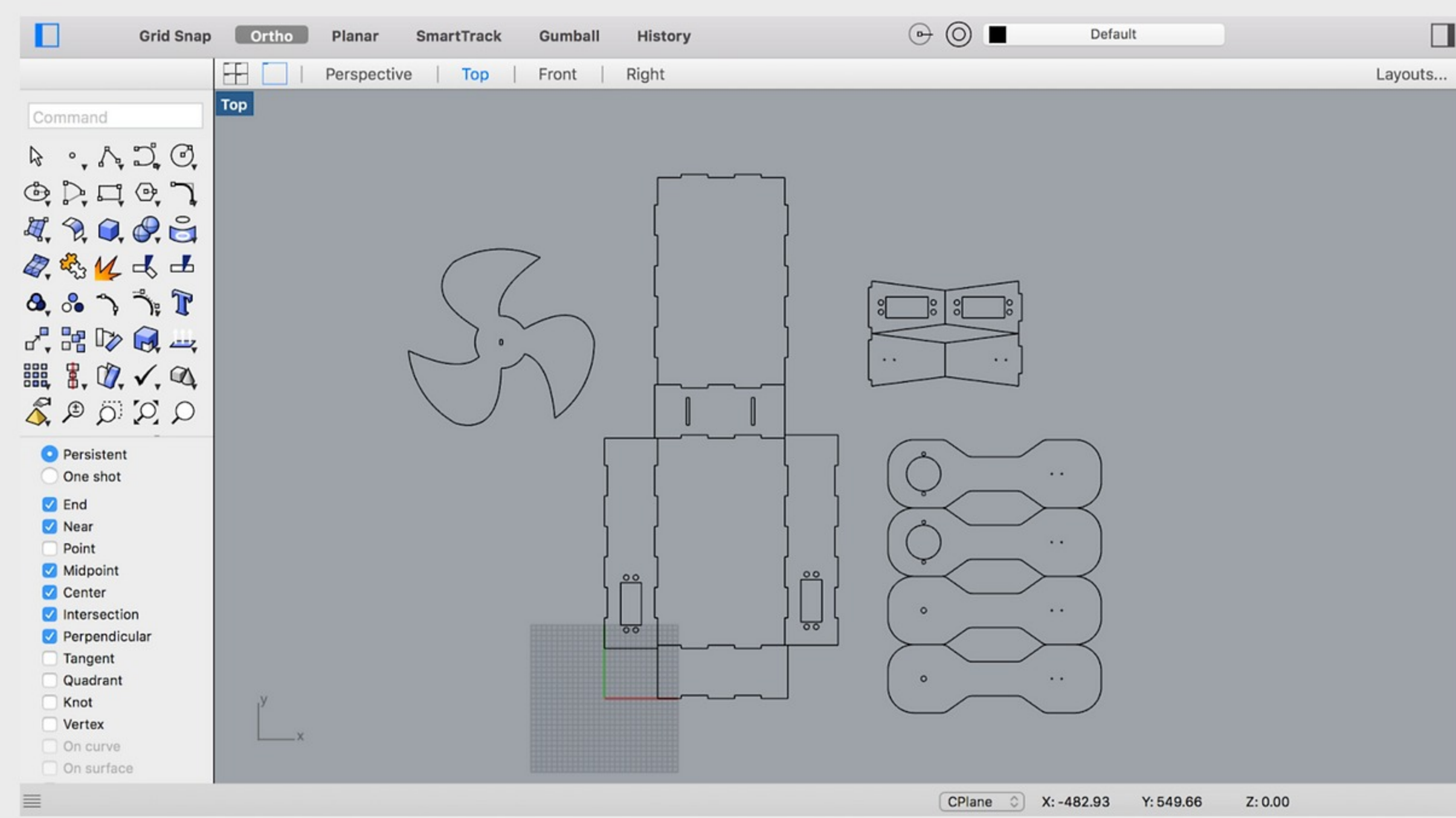


Egg-Bot

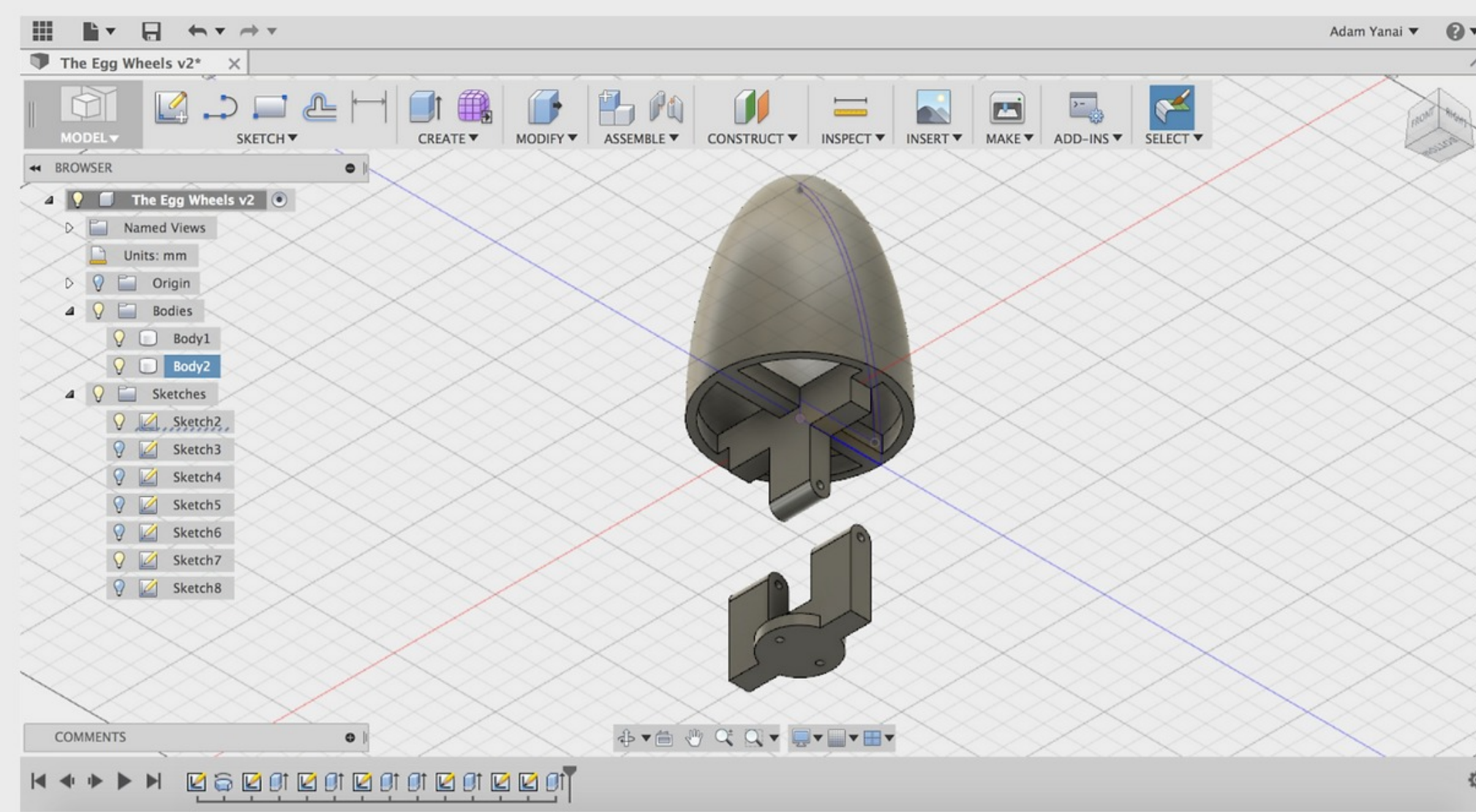
My 'introduction to robotics' project was centered around creating a robot fit for combat/defense and exploration in uneven terrain. The design concept was that the robot would be able to overcome a variety of obstacles through its egg-shaped design, as it would be impossible to topple it over and place it in a situation where it wouldn't be able to continue moving.



The initial concept design.



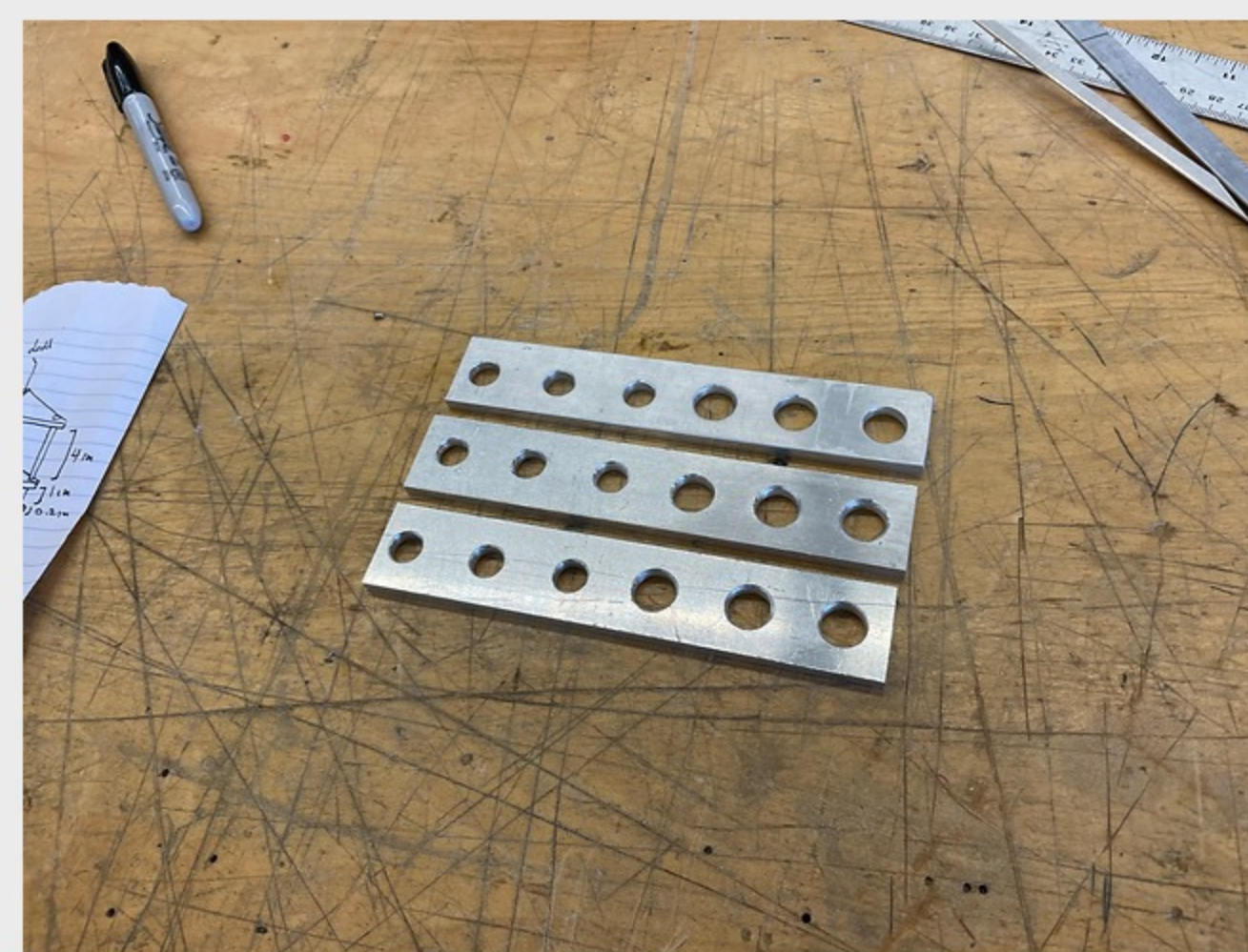
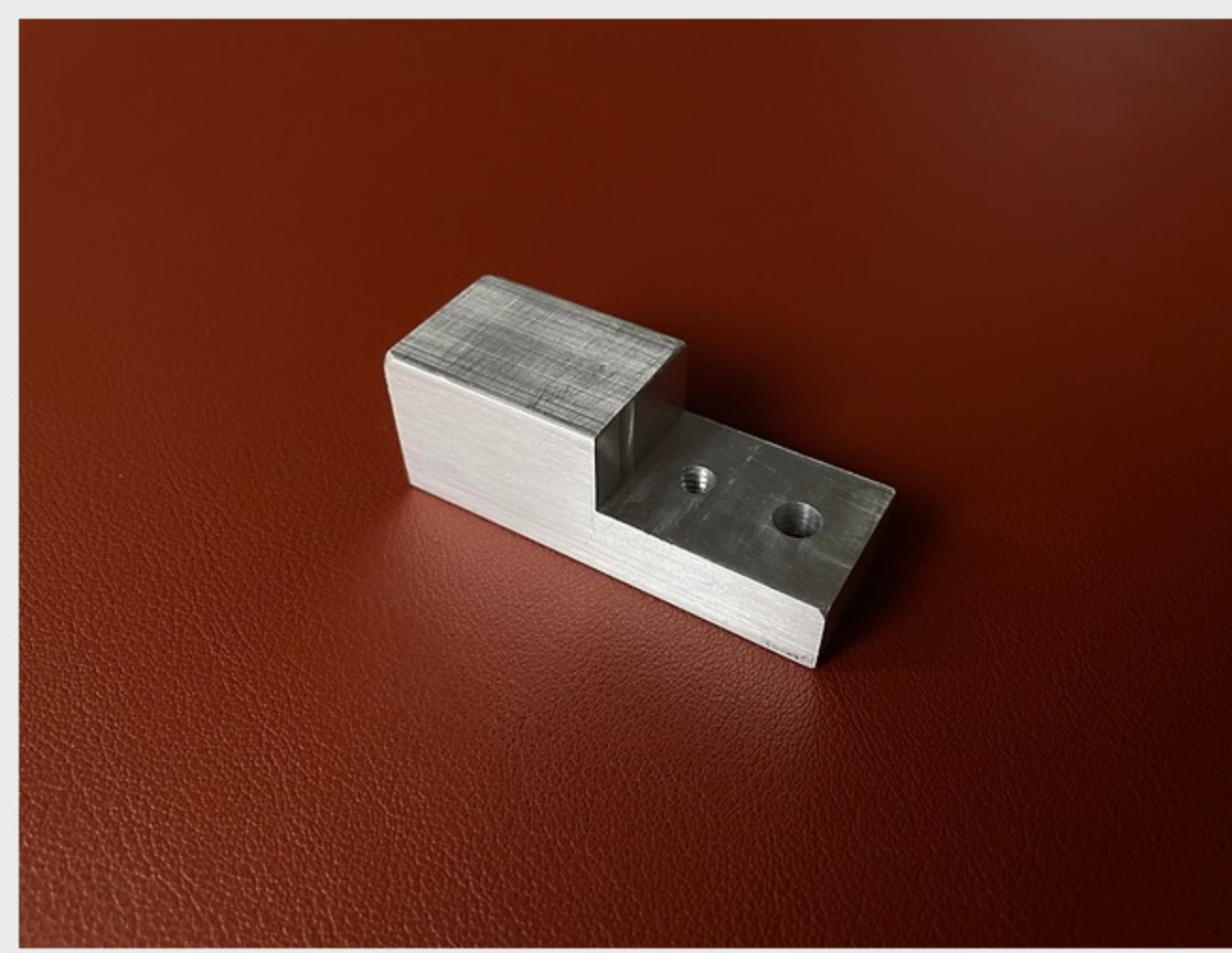
Laser-cutting pathways for creating the home compartment and arms + blade for the combat aspect.



The final design for the 3D printed 'wheels' and hinges that attach to the laser-cut compartment.

Machinery

Through working at EPIC-BU, I have been able to grow my product design skills. While assisting visitors at EPIC has helped me improve my previously-gained abilities - such as laser cutting and 3D printing - training in the use of subtractive manufacturing machinery - such as the mill and lathe - has opened up new possibilities for my creations.



Drill Punch Holder

Below is a drill punch holder that I designed and manufactured for EPIC.

