

OpenSCAD Documentation

My OpenSCAD model represents an Engduino stand which has the shape of a Star Wars spaceship.

The model is composed of various shapes like polyhedron, cylinder, sphere and cube. It has two main shapes: the actual spaceship and the support shape. So, I created two versions of the 3D model, one in which the spaceship and the support are combined and one in which the two components are divided in two separate files. Both versions are designed to support the Engduino in a special hole created on the upper side of the spaceship.

In the OpenSCAD folder there are 3 sub folders containing one file each. The Engduino subfolder contains the 'Engduino.scad' file which has the spaceship and the support combined. The Engduino_ship subfolder contains 'Engduino_ship.scad' and Engduino_support contains 'Engduino_support.scad', both of these files having the ship, respectively the support in separated files. However, after printing they can be put together by inserting the support in the special holes of the ship.

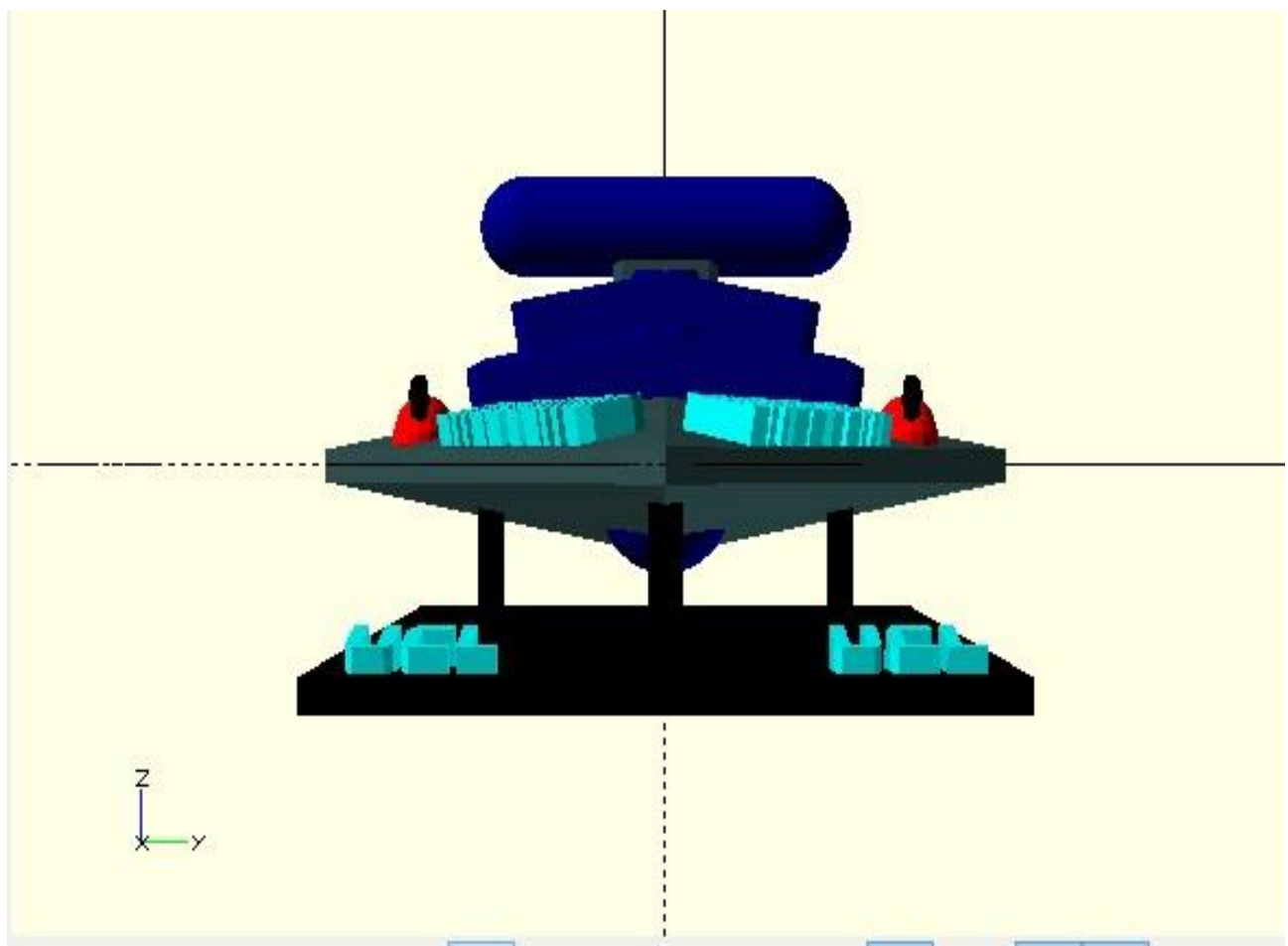
The support is a simple construction, consisting of three cylinders and one cube shape which can support the weight of the spaceship. It also has text displaying "UCL" using 'Spiff.scad'

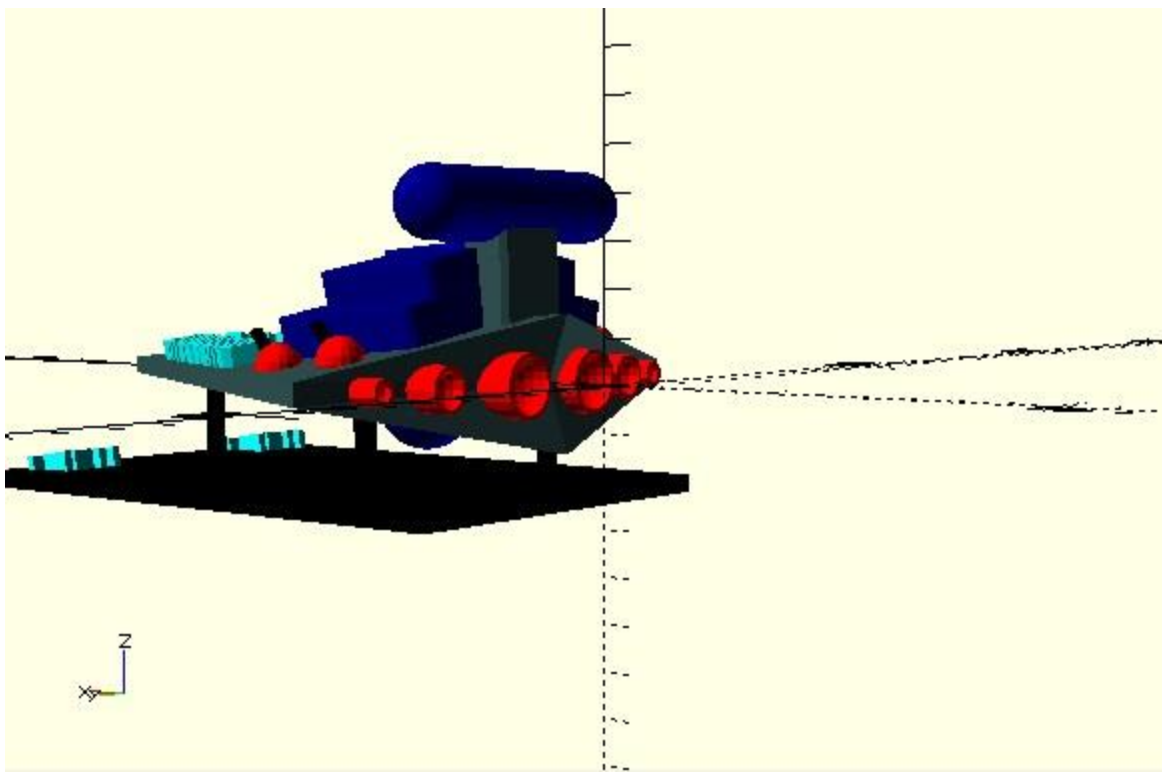
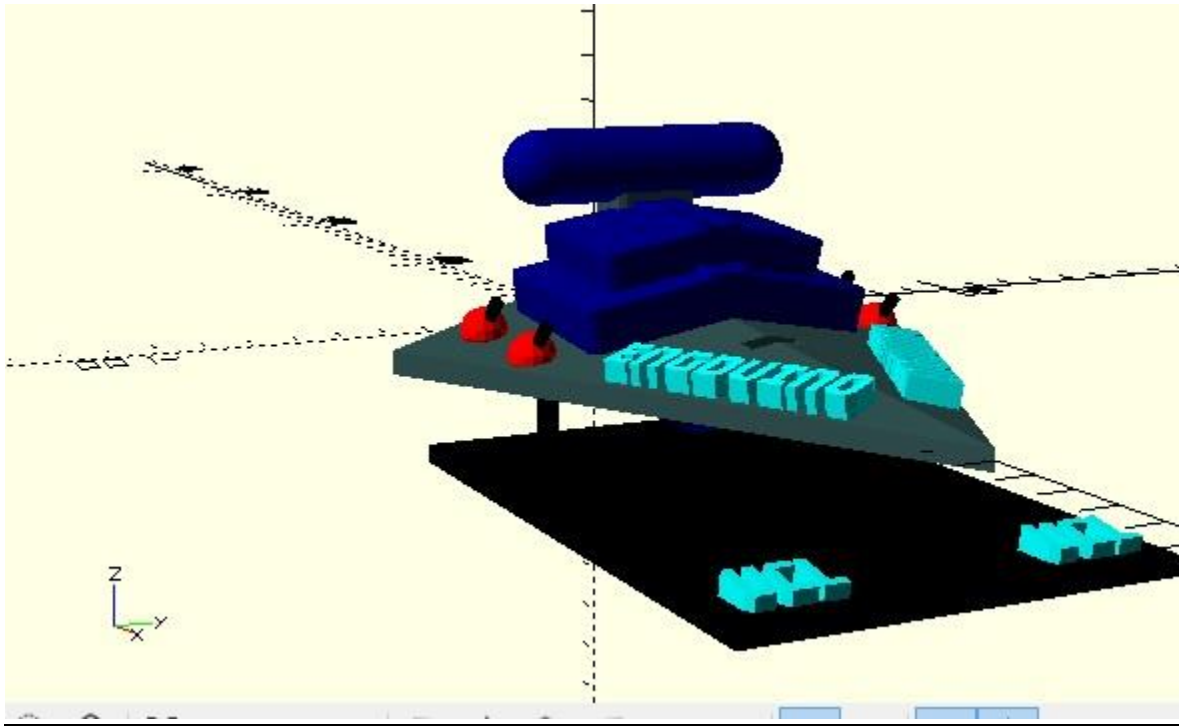
The spaceship is more complex and has various other sub-shapes:

- The body which is a multi-face polyhedron
- The engines which are cylinders with sphere extractions
- The top blocks which are actually rounded cubes
- The top Athena which is composed of two spheres
- A space where the Engduino USB can fit
- Text displaying "Engduino" using Spiff.scad
- A bottom sphere and some other details like guns

SPACESHIP AND SUPPORT COMBINED

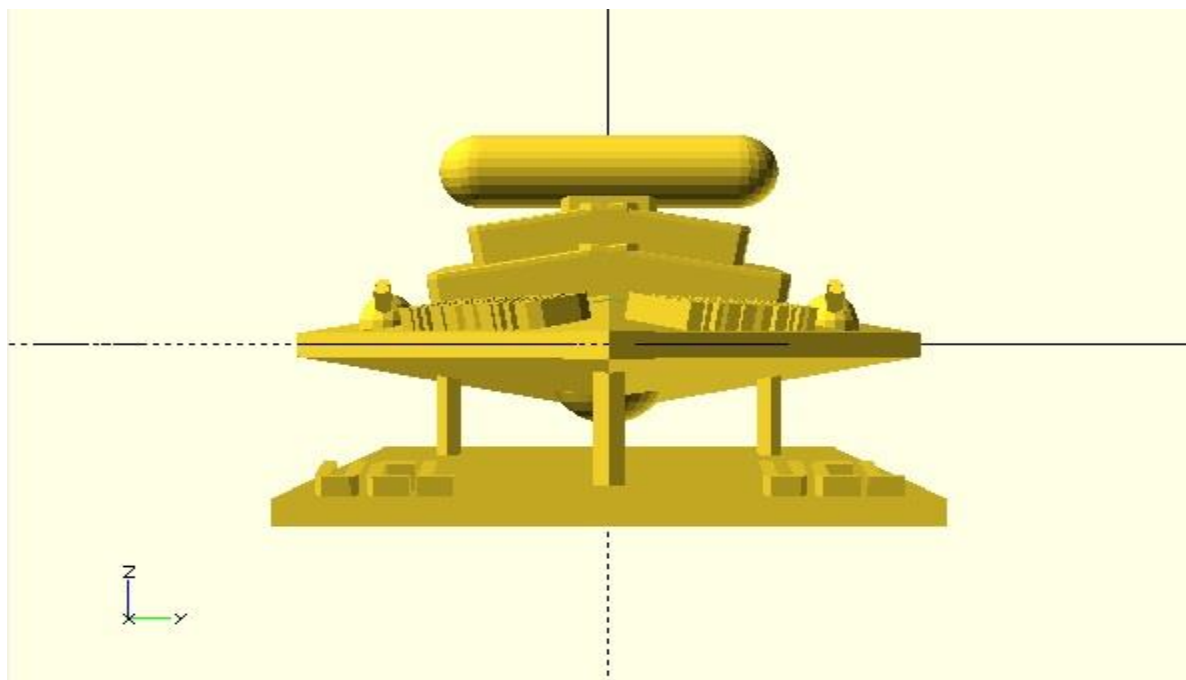
-PREVIEW

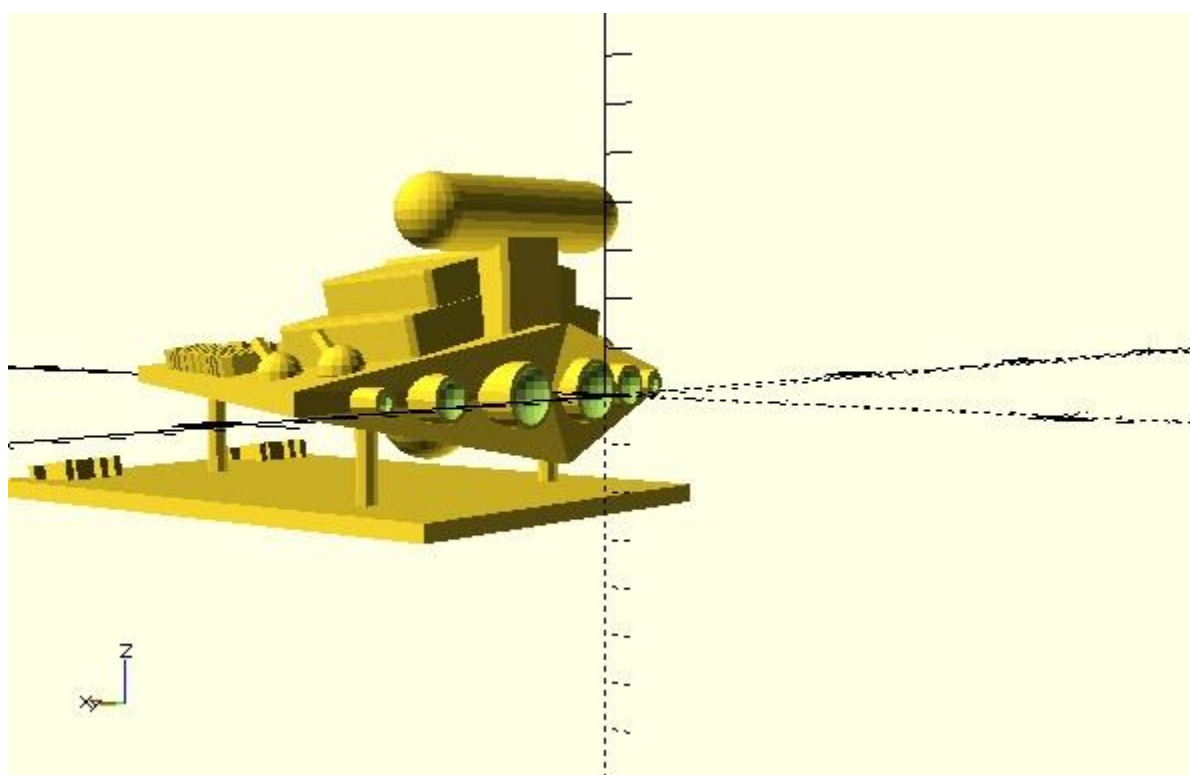
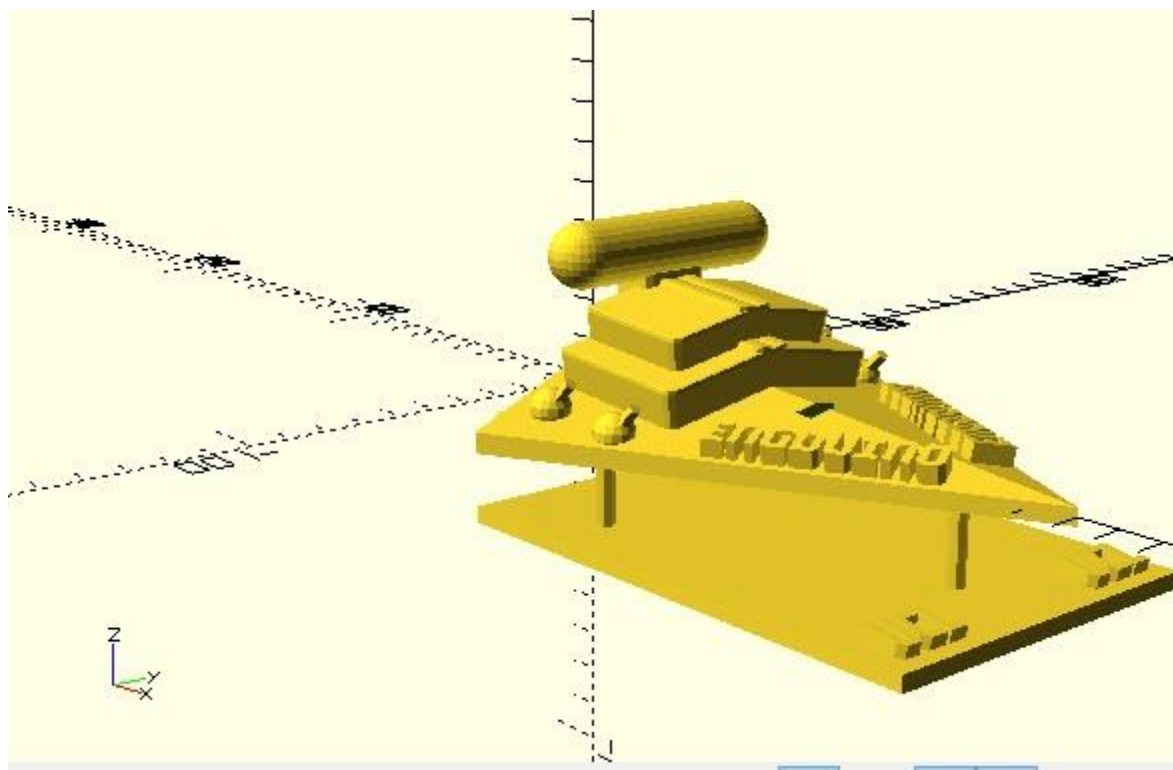


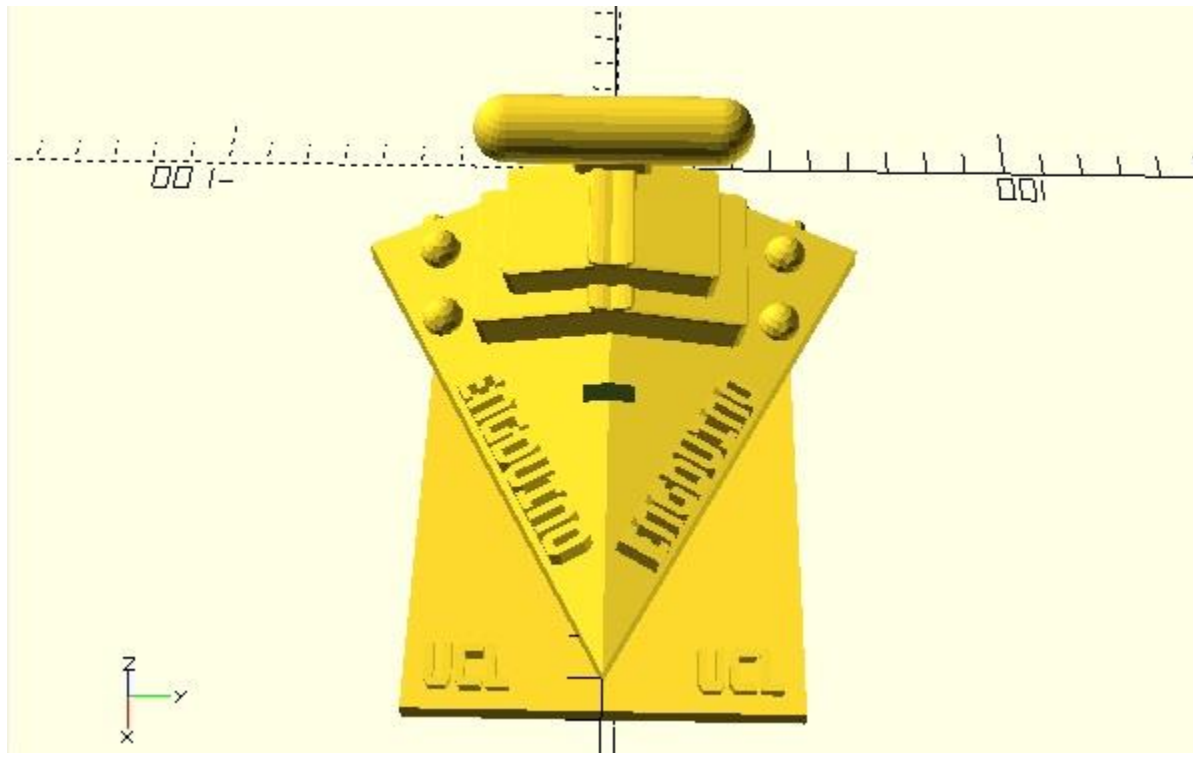




-RENDER

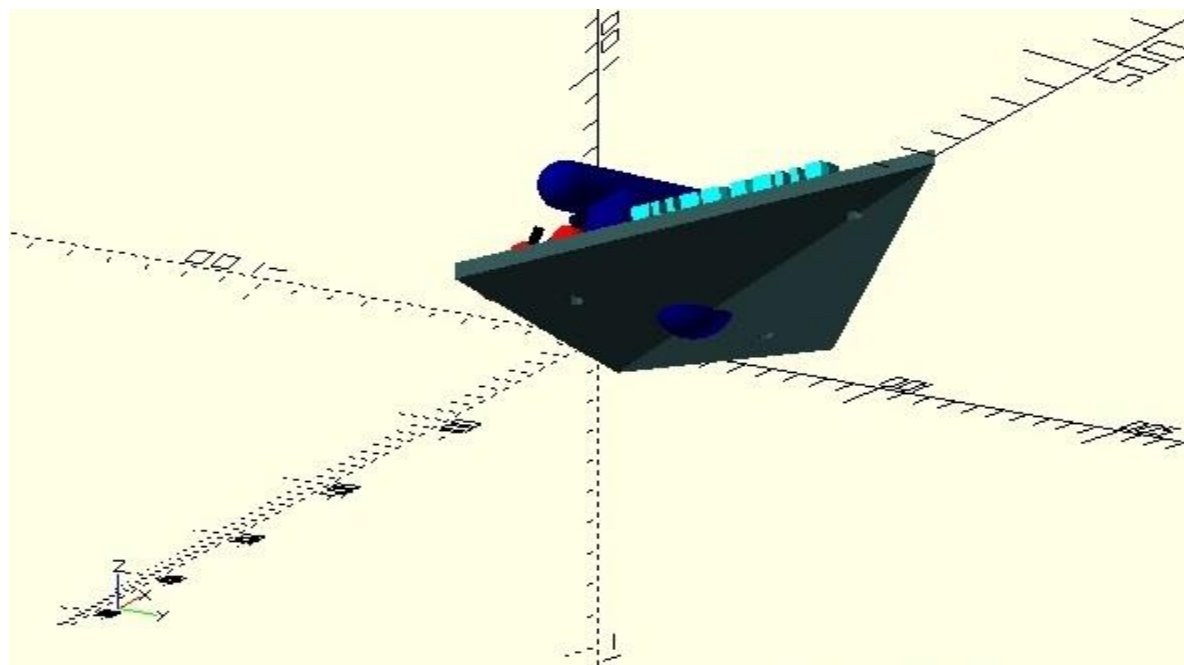


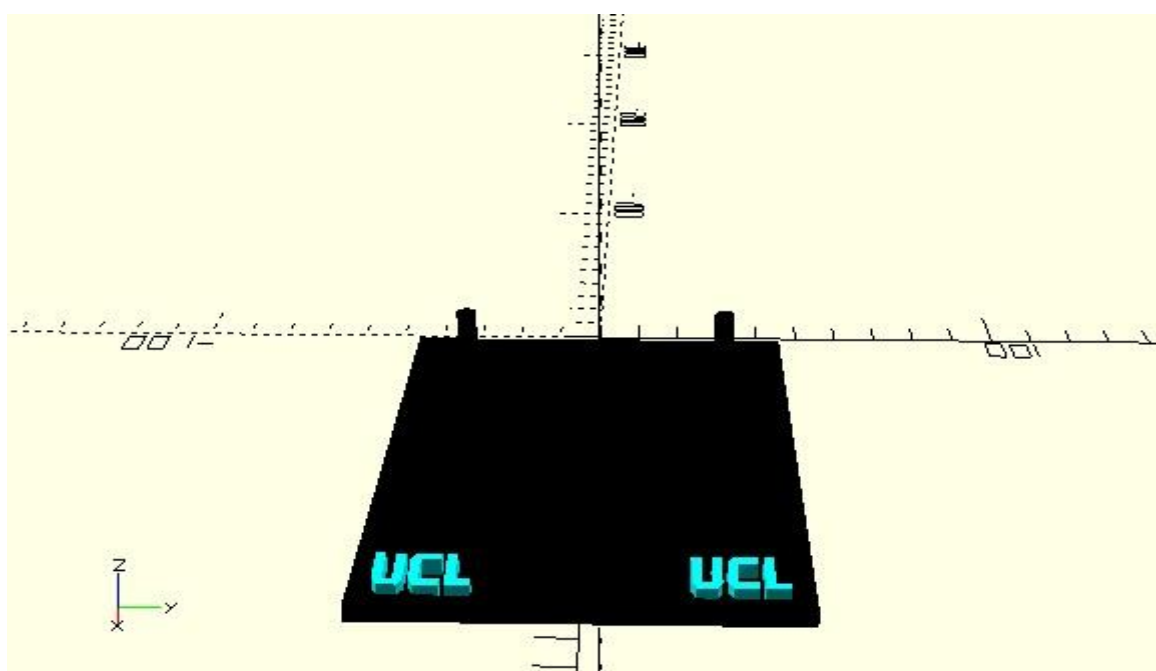
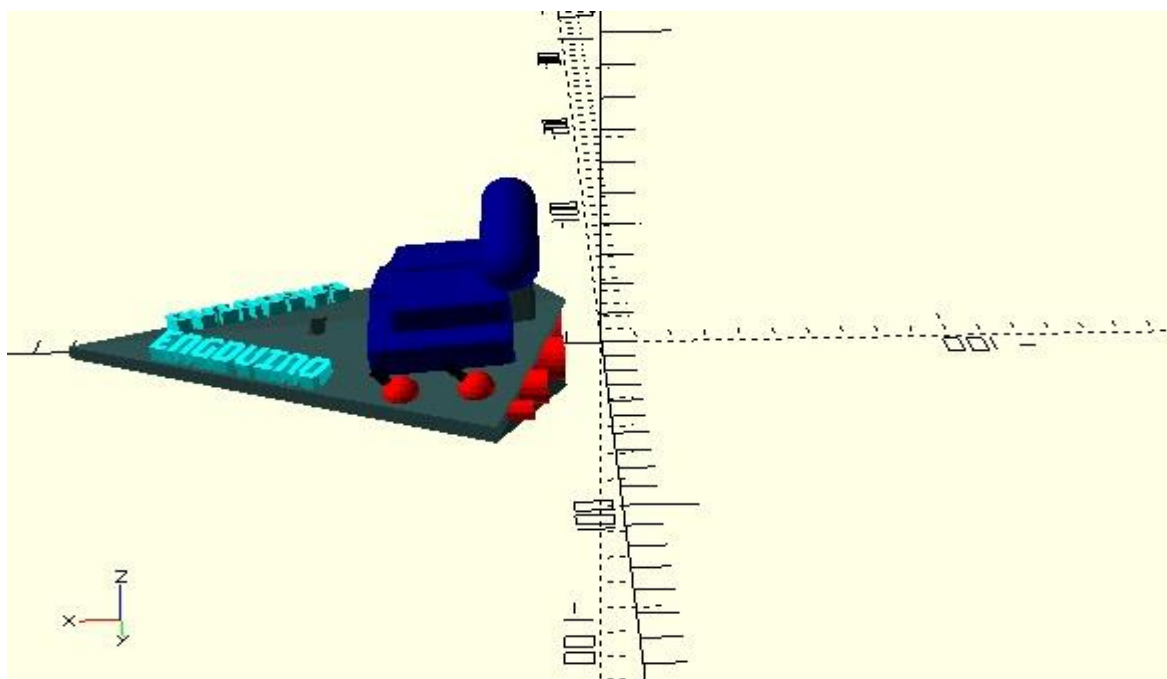


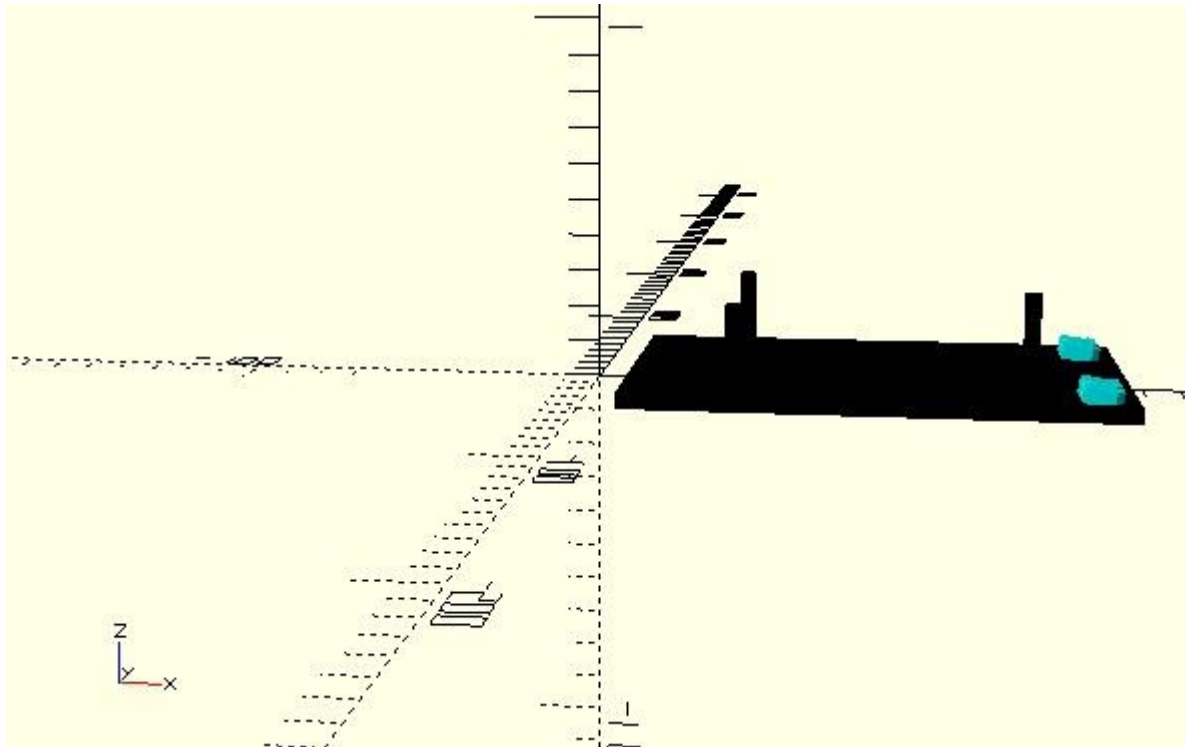


SPACESHIP AND SUPPORT SEPARATED

-PREVIEW







-RENDER

