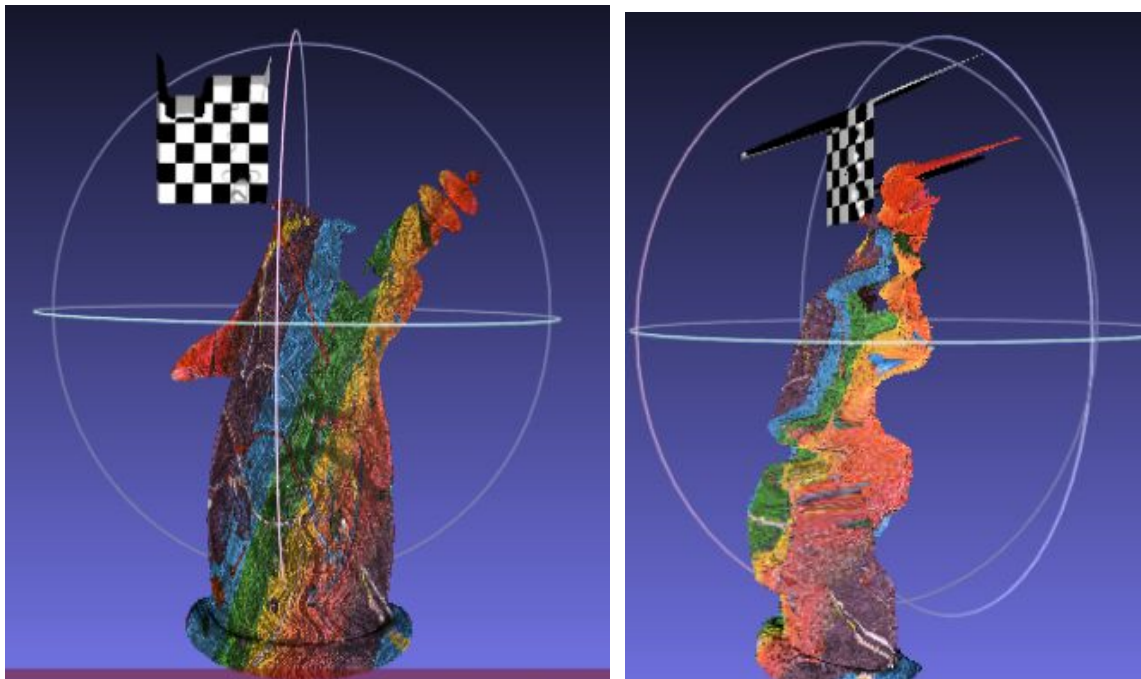


## CV PA4 Outputs (Part 3)

Andrew Dodd (aad227), Katherine Tang (kat86)

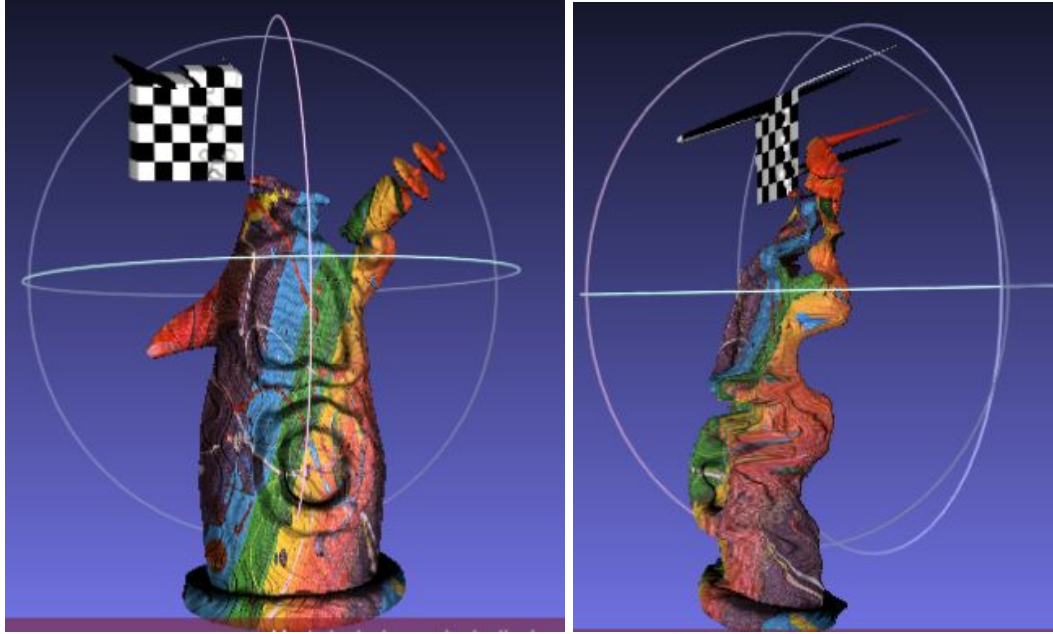
### **Tentacle Both:**

Overall, “Tentacle Both” looks fairly good. This has repetition on the top left with the checkerboard that leads to incorrect feature matching and therefore incorrect depth reconstruction. On the laser gun, there also seems to be occlusion; the back of the gun is difficult to see, which also makes it hard to reconstruct the depth. This fault comes from mistakes of the plane sweep stereo. Also the combination of the normals and depth data onto one mesh makes the result look disconnected especially around the center of the body.



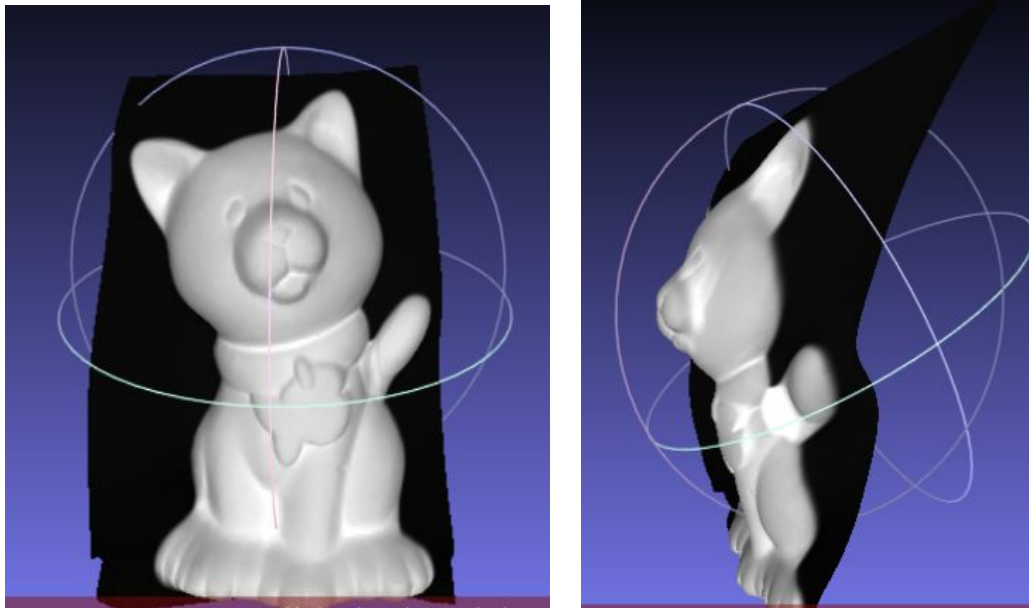
### **Tentacle Depth:**

The checkerboard here appears to have the same problem as “tentacle both”, which looks like the fault of the plane sweep stereo. This has the same problem with repetition of the checkerboard and the occlusion of the gun as “tentacle both” since both use depth, resulting to the same problems.



### **Cat Normals:**

Cat looks good. It seems like “Cat Normals” is being calculated with just the photometric stereo, and it is not attempting a depth map reconstruction (as plane sweep stereo would do). There are no problems that jump out except for the fact that the edge of the cat’s body is connected to the background. This is due to the fact that we are not finding depths, only normals.



### **Flowers Depth:**

The picture suffers from occlusion due to the the house behind the flowers being blocked off from view depending on the angle each picture was taken. The varying illuminations of the different pictures at different angles also cause problems with the feature matching. This depth error seems to stem from the plane sweep stereo.

