

## Weekly Report

Name: Nilesh Hampiholi

Matriculation No.: 54811

Topic: Robot Guided Surface Scanning with Ultrasound

Date: 25|2|2022

### **Tasks Done:**

- I completed the calibration and the image reconstruction part
- For image reconstruction the images are segmented and then the pixels are treated as points to obtain a point cloud and I plot them as a surface. I have added a figure at the bottom for reference.

### **Issues:**

- The calibration results are really bad. I tried to sample the collected data but the results don't improve.
- I think I have made a mistake during data acquisition as I captured the images along the whole length of the phantom.
- Also, since I am generating a point cloud of the 3d part I have to scan it from multiple angles to cover all the faces.

