

Weekly Report

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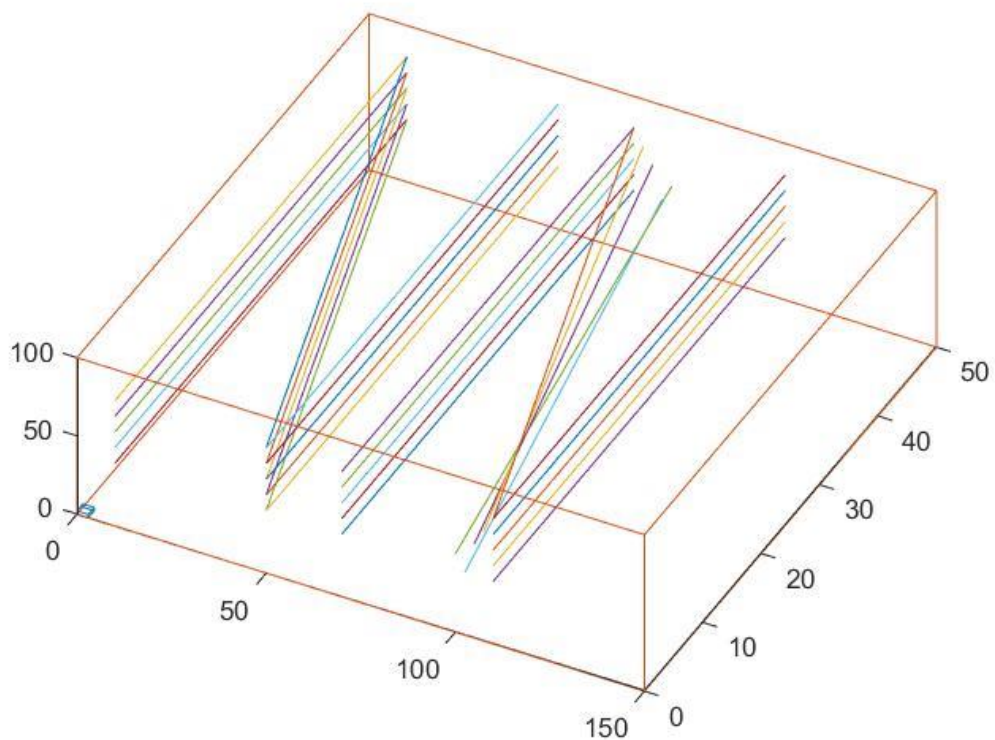
Matriculation No.: 54811

Topic: Robot Guided Surface Scanning with Ultrasound

Date: 27|09|2021

Tasks Done:

- Modelled the phantom and gave it for 3d printing.
- I have written a function to get the distance between the centroids
- The phantom looks something like this.



Question Description:

- So, the paper uses RANSAC approach to fit the data into rectangles and then classify the points as left strand, middle strand and right strand points.
- Then again uses RANSAC to fit a plane through 3d points of the middle strand.
- The using the model paraments of the fit find a projection and estimate the x, y, z translation from image to phantom.

- I find it pretty similar but I am not able to correlate yet.
- Should I try implementing this or do you have any paper where I can find better theory to implement.
- Paper also does not find angles explicitly by geometric method.