

Weekly Progress - (Week of Feb 3rd - Feb 9th)

- I am currently reading the review paper on gripping methods for robotic arms.
- I am also going through the specific review paper on parallel grippers, as this could give me some insight on how to pick up rotated objects.
- In the lab I have started to work on recreating the experiment shown in the paper 'Self-Supervised Unseen Object Instance Segmentation via Long-Term Robot Interaction'. For which I have found the github repository for at the following [link](#) and am installing the dependencies for the same
- There was a bit of an issue with the compatibility of certain dependencies so I had to find some workarounds, which should be done and ready by Monday(12/2)
- In the meanwhile, while the dependencies were being installed, I was working on setting up the sweeping mechanism for the robotic arm, so that the arm can push the objects around for better segmentation as proposed in the paper.
- Below there is a link to a basic video test of the sweeping motion of the arm. I want to make sure the arm doesn't drag across the table, but it still touches the objects.
- Later I have edited the code and tested it in simulation on rviz, but I will have to test it on the arm itself in the lab on Monday.

📹 VID_20240209_114721.mp4

Next Week goals:

- I will work on making the sweeping motion work more smoothly
- I'll fix the issues with the dependencies of the segmentation model
- I want to test the segmentation system fully and analyse the data collected from the segmentation.
- I will start setting up EasyLabel and create a dataset of objects.