

Progress Report

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1 Progress

Following items are listed in order of priority:

- OCRTOC: I managed to setup and run OCRTOC container on my laptop and test the competition environment. Chris and I will continue working on the simulation since it is due September 13th. We discussed using an available ROS package for instance segmentation.
- UR5: I set up the robotic arm at the center of the table as discussed but it is also simple to move to any side if needed. I put the electrical box behind the futon and that is where the hand controller is connected too. We probably need some zip tie to secure the cable to the table and something to secure it to the floor.
- TensorFlow: Read the first chapter of [1]. I think it is a great book to read in junction with other material since it uses latest python packages.
- Chris and I attended Amazon Robotic Summit earlier this week. It was mostly Amazon directors and management team presenting their cloud computing service for large scale and easy to deploy parallel simulation testing environment. They also talked about ROS development on AWS and its integrated features with Amazon's RoboMaker.
- Fellowship: I still need to work on my applications, I will write a new draft by next week. I have been avoiding this for far too long.
- Machine Learning: I did not work on ML course this week.
- (On pause) Nolan and I have continued to work on TISR paper, I started a new document where I summarize background information. A copy of this document has been uploaded to GitHub.

2 Plans

Following items are listed in order of priority:

- Continue to work on OCRTOC with Chris and begin working with instance segmentation ROS node.
- Go through ROS Industrial tutorials and documentation.
- Resume Robotic Perception course as soon as possible.
- (On pause) Begin working on quaternions tutorial.
- (On pause) Need to read [2], [3], [4], and [5]; these papers seem fundamental to understanding the overall picture.
- (On pause) Read Digital Image Processing by Gonzalez and Woods.
- (On pause) I still need to dissect [6], [7], [8], [9], [10], and [11].
- (On pause) I still need to dissect [12].

References

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- [12] W. K. Zinsser, *On writing well : the classic guide to writing nonfiction*. New York: HarperCollins, 30th anniversary ed., 7th ed., rev. and updated ed., 2006.