15/8/21

Ideas and Planning

Things done:

1. Discussion of ideas (Settled on a cluster tracking autonomous robot)
2. Setting up of telegram group
3. Discussion of planning and logistics on the telegram group
4. Held an online meeting to distribute tasks
5. Write a proposal
   - Have a list of items and pricing needed for the project
   - Thought of the software and programs required
   - Researched on various algorithms and AI models
   - Have a cad sketch of the robot

Current state of project:

- Setting up an online consultation with the TAs to discuss on the project idea and seek feedback

Problems faced:

- Body might be hidden and hence making the cluster size detection inaccurate, hence, opt to detect shoes as shoes are harder to be hidden. However, shoes are easier to be temporarily blocked and thus, the implementation of Kalman filter.

- In the case of 2-way traffic, the robot might go in a loop and only patrol in the area. Furthermore, if there are no people present. The robot might be stuck (however, this should be a very rare case as there is no reason to place the robot in an area with no traffic)

Work to be done:

- Find AI models based on shoes
- Gather full information on the items sourced (voltage and power)
- Finish the list of items we need by looking for the required voltage regulators/buck and boost converters etc