Comp2403 Robotics: Guidance for Voice Recordings

Portfolio

You need to include only 4 pieces of work, one for each Learning Outcome; consult the mapping sheet provided

Put page numbers in the header or footer

Label each image or diagram: "Figure 1" etc.

Add line numbers to any code

You can choose either to (i) include a complete code listing or (ii) include code snippets in your text.

Remember to include **original material** to get a high grade. Perhaps reference to a journal article, or a book chapter. This is likely to be part of your DBT mini-project.

Submission date 3pm Monday Jan 4th 2021 in the BBoard drop-box

The voice recording

You can submit 4 files, one for each piece of work, or you can record everything into one file.

Remember who will be listening; myself and maybe the moderator or external examiner. So don't assume that the listener can add in any gaps in your explanation.

Submission date 3pm Wed Jan 13th 2021 in the Bboard drop-box

The questions

For each piece of work

1) Briefly introduce the scenario, say what the robot was intended to do.

2) Then answer the question I will email you, in as much detail as you can. I will not expect you to discuss every single line of code, only the code relevant to the scenario.

Example question

Here's what I will be looking for in the case of the vision-based line follower.

1) Explain how you derived the "error" signal

2) Explain how you used this to compute values for omegaL and omegaR

3) Explain how omegaL and omegaR make the robot move

4) Explain how the error signal and the omegas keep the robot on the line

To achieve an excellent grade

5) Explain how the functions **imageSegment(…)** and **getAvLocation(…)** work.