

ECE570: Control Theory

Monsoon 2020

Group Project: Minutes of meeting

Project#2: Radar control in 3-dimensional space

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Meeting#1

Note: First meeting between the group members;

1. **Date & Time:** 3rd October, 2020. 2100 hours
2. **Meeting Agenda:**
 - To evaluate the project task received, and deciding on the approach to be taken for the solution.
3. **Present:** All members
4. **Meeting Summary:**

The challenge was de-compiled into modules to be worked on.

 - The plausible structure of the radar was discussed. It was chosen to be elevation over azimuth mount.
 - The choice was discussed if we want to use only linear equations into consideration, or to include the non linear effect of gravity into the control equations.
 - Discussion on how to create a simulink model.

Finally, it was agreed upon to work on the equations individually first and then regroup and peer review them.

5. **Conditions for the next meeting date:**

The next meeting was scheduled to be held after the mid semester exams.

Meeting#2

1. **Date & Time:** 20th October, 2020. 2000 hours
2. **Meeting Agenda:**
 - To evaluate the current work done and to start working on modeling and other official tasks.
3. **Present:** All members
4. **Meeting Summary:**
 - The equations were reviewed and finalized.
 - The current set of equations proposed confusion and queries regarding some of the, at the time, unknown parameters.
 - Was decided to organize a meeting with the professor in charge.

Meeting#3

Note: First meeting between the group members;

1. **Date & Time:** 23rd October, 2020. 1100 hours
2. **Meeting Agenda:**
 - To resolve confusion and present queries with the professor in charge.
3. **Present:** All members + Dr. Sanat K. Biswas
4. **Meeting Summary:**

The queries were presented to the Professor.

 - (a) The unknown parameters:

It was recommended to use the given conditions of moment of inertia to resolve the unknown parameters. It was allowed to make rational assumptions to support our work.
 - (b) Typing mistake in the project task description:

Was told to be ignored.
5. **Conditions for the next meeting:**

The next meeting required to have pre-solved the unknown parameters to finally start working on modeling the equations.

Meeting#4

Note: Final meeting between the group members;

1. **Date & Time:** 24rd October, 2020. 1200 hours
2. **Meeting Agenda:**
 - To finalize the derived length parameter and finish working on the simulink model.
3. **Present:** All members
4. **Meeting Summary:**
Simulink modeling and other tasks were completed.