EYSIP 2020 Weekly Report

Saturday, 06.06.2020

Cycle BOT using LQR

Team 1 (LQR)

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Important Points

Three experiments were designed.

- i. Finding out Kinetic Energy of the System and Potential Energy of the system. Finding out Lagrangian of the System and Euler Lagrange equation.
- ii. Jacobian and Linearizing the System. Finding out the Equilibrium Points and types of equilibrium.
- iii. Equating them and finding out the Parametric State- Space Model. Substituting Practical Values and Checking for Controllability of the system.

Relevant Links:

• All the work has been updated in the GitHub repository in the WEEK_4 folder.

Link