

Welcome to NB theme!



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Balancing Platform Design

Introduction to Control Systems

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Live Session 1 - 24th October 2020

Live Session 2 - 21st November 2020

Live Session 3 - 12th December 2020

Live Session 4 - 10th January 2021

Changelog



eYRC 2020-21: Nirikshak Bot (NB)

Task 3

[Last Updated on: **13th December 2020, 11:30 Hrs**]

Welcome to **Task 3** of **Nirikshak Bot**.

The aim of this task is to **learn** the concepts of Control Systems, 3D Designing, Algorithm Building and Robotic Simulation.

Resources provided to complete this task are as follows:

1. [Tips and Tricks to improve your Ball Balancing Platform Design](#)
2. [Introduction to Control Systems](#)
3. [Understanding Proportional Integral Derivative \(PID\) Controller](#)

NOTE: Do not attempt the task before understanding the resources.

This task contains only **one** part:

- **(1) Balance ball on platform**
 - This task is based on developing a **control logic** to **balance the ball on top of the ball balancing platform**.
 - Teams should apply the concepts **learnt in Task 1, Task 2** and build a **python remote API file** to stabilize the ball at a particular setpoint on the platform using **vision sensor' image** in the given CoppeliaSim scene.

ALL THE BEST