

Assignment 1

ME 639 - Introduction to Robotics

IIT Gandhinagar

Assigned: 10 August, 2021

Due: 11:59pm on Wednesday, 18th August, 2021

on GitHub repository <https://github.com/harishpmiitgn/iitgn-robotics/>

Collaboration Policy: Collaboration is not permitted on this assignment. All submitted material must be your own material.

Tasks:

1. Read Chapter 1 of the textbook.
2. Identify one or two examples of robots for each of the seven categories of robots mentioned in class. Submit your selected examples as a list of youtube links with 2-3 line explanations for each.
3. Review the most common types of motors and summarize them with a 2-3 sentence description of each of them. The description offered in [this video](#) may be a good starting point.
4. Review the basic kinematic principles summarized in [this video](#).
5. Review the key ideas related to connecting motor drivers, microcontrollers and power supply to a motor described in the [link here](#). This information may be useful for future implementation.

Submit the assignment in the form of a PDF with active links for Task 2 and appropriate explanations for Task 3. Nothing is to be submitted for tasks 1, 4 and 5.