

ENPM662 - Fall 2022

Introduction to Robot Modeling

Project-02: Proposal

Building upon your idea in the pre-proposal stage, write a fully descriptive proposal (expected length ≥ 6 pages) indicating your plan for your term project. Your proposal must at least contain the sections given below, however, do add more information if you think it's required to explain your project better! Grades will be based on the following criteria.

- **Introduction and Organization** : A brief context intro and describe how the report is organized.
- **Motivation**: Why was the problem statement chosen? What interests the student?
- **Robot Description**: Specify geometric aspects, a brief idea of robot's sensors, motors, joints, material (if critical in design).
- **Robot Appropriateness for the task** : Why is this robot design apt for this particular task? Justify design.
- **Scope Description**: Describe the robot's possible scope of study and which part of the robot's functions will be studied in this project. ***Mention your ambitious and fall back goals here.***
- **Scope Appropriateness**: Justify the chosen scope of study's significance.
- **Model Assumptions**: Mention every assumption one can think of.

- **Approach to performing the work:** Mention the tools to be used, implementation plan and mention all external resources such as libraries, CAD sources (if picking up a model).
- **Milestones with timeline** : Complete timeline starting from pre-proposal to report+simulation+ppt submission which includes intermediate milestones.
- **Validation Plan:** Explain how the validation of implementation will be done.

Submit the above description in a PDF (**>= 6 pages**) including the information of the team members.

Name the file: **<directoryID#1>_<directoryID#2>_proposal.pdf**. One submission per team is sufficient and counts for all members.