## ENPM 667 Project # 1

University of Maryland, College Park

**Due Date:** Nov 7 in ELMS

## INSTRUCTIONS

- Please send an email to the TAs with your paper selection. The TAs will analyze the paper content and provide preliminary approval or reject the paper. The TAs will share your paper (that has preliminary approval) with the instructor for final approval. Once fully approved you can start working on the project. Multiple papers can be selected.
- The paper should also be attached to your final submission.
- The project will be submitted online in ELMS.
- Students are allowed to select only Journal Papers. For exceptions contact the TAs/Instructor.
- The final document needs to be written in a type-setting document processor like LaTeX, LyX, Micorsoft Word etc.
- You are free to choose any software package for running your simulations.
- Code for running your simulations needs to be included in the final report.
- Submission extensions will only be provided under exceptional circumstances.
- Two students are allowed (not required) to work as a group on this project.
- This project can also be extended into an indepedent study course in the future.

**Project 1 (250 points):** Select a Journal paper (or several papers) with a significant control and robotics component and write a technical report on it. You are expected to write and explain the main technical result(s) and affiliated proof(s) in complete detail. In addition, you need to simulate all the results in the paper and provide your simulation code and results in your final submission.

You are free to choose any technical format for the technical report. However, sections comprising an abstract (or summary), introduction (or background), discussions and conclusions, and bibliography should be present in the report. The technical report should be complete and all concepts and results should be explained in detail. You are encouraged to use references (books and papers) to enhance the quality of the final report.

In addition, you also need to create a 15min presentation summarizing your work on the project along with the main results and simulations.

## **Grading Policy:**

- This project will be worth 20% of the total course grade.
- The project will be graded on the quality of the final technical report (200 points) and the presentation (50 points).
- Students who do not get the paper approved will be given no credit.