Assignment 1 – Introduction

Kinematics, Dynamic Systems, and Control is a graduate level introduction to robotics. The course covers fundamental concepts and methods to analyze, model and control robotic mechanisms which move in the physical world and manipulate it. The goal of the first assignment is for you to tell us about your motivation to take KDC. There is no template solution to this assignment; you get the points for working through it.

After completion of this assignment, you should be able to clearly articulate your motivation to take KDC.

1. Your Motivation

Answer each of the following questions with a few sentences. (**5pts**)

a) Why are you taking KDC and what outcome do you expect from taking this course?

I want to learn how to model and design a robot from scratch. I hope I can accomplish the project with my teammates and use it as template for the future work.

b) Have previous courses got you interested in KDC? Which and why?

The bipedal section taught by Professor Geyer in 16665 Robot Mobility last semester. His lecture is so attractive and I like his teaching style.

c) For which courses that you plan to take later do you think KDC is an important step?

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d) What robot mechanism are you working with or planning to work with?

I am interested in drone and Bipedal control.

e) How important do you think will this course be for achieving your research goals?

I would like to work on how to control the swarm of drone later. And a deep understand for the dynamic of drone is essential.

f) Do you have experience working on team projects and presenting your work with slides?

Yes. I have been working on a welding robot project last semester.

g) What project do you plan to work on?

I would like to design Tars in the movie interstellar. I want to figure out how to control a robot like that.