Course: ENPM 808K Human-Robot Interaction
Instructor: Joseph Schaft
To be offered Fall 2016

Purpose:
Define the intersection of human-robot interactions to include human-computer interfaces as well as robotic emotions and facial expressions emulations. The result will provide a basis for students to assess the best approaches for interacting effectively with robots. Since the areas of expertise extend across several technical fields, guest speakers will be brought in for some of the classes.

Prerequisites:
As a graduate course involving research in human-robot interaction, the students are expected to have technical undergraduate degree in Engineering. Research will be done by students for the semester project.

Evaluation:
This course will be evaluated and graded on the percentages below, based on the following student responsibilities and deliverables:

- In-class Participation (20%): This course is interaction-intensive and includes interesting guest speakers who are experts in their domain, so an important class requirement is attendance of those guest speakers' presentations, followed by active discussions with the speakers. You are encouraged to engage the speakers to answer whatever questions that you have on their presented topic area.
- Midterm (20%): This will cover specific aspects of readings and speakers' key points.
- Written summaries of guest lectures (10%): These are due before the next class after the lecture.
- Group Semester-long Projects (50%): This is the majority of your out-of-class work for the semester. You may perform this work in teams of 1-3, who will stay together throughout the semester. After forming teams early in the class, each team will select a scenario and application for which they will design a human-robot interactive concept, not necessarily an actual hardware or software product, related to HRI. Each team will document their design and prototyping process. The final presentations shall include a conceptual demonstration of the interaction system, which may or may not include audience participation.

Reading Assignments:

The readings for this course are diverse, including a sampling of works from design, cognitive psychology, HCI, computer science, robotics, etc. In some cases, the relevant reading is assigned to be done in time for a guest speaker's presentation, so that you can get the most out of the speakers' presentations. In other cases, the readings provide background for in-class discussions.

Code of Academic Integrity:

The University of Maryland, College Park has a nationally recognized Code of Academic Integrity, administered by the Student Honor Council. This Code sets standards for academic integrity at Maryland for all undergraduate and graduate students. As a student you are responsible for upholding these standards for this course. It is very important for you to be aware of the consequences of cheating, fabrication, facilitation, and plagiarism. For more information on the Code of Academic Integrity or the Student Honor Council, please visit http://www.studenthonorcouncil.umd.edu/whatis.html.