

CS 7633 Fall 2016 Project

The goal of the course project is for each student to have the opportunity to explore a single HRI topic in greater depth. Whereas the course lectures and reading cover the field broadly, the project topic is meant to address a single, focused research question in detail.

The project can be done individually or in a group of 2-3 people. The scale of the project should reflect the size of the group.

The project can focus on any topic related to the general field of Human-Robot Interaction. Possible project topics include:

- a) Implementing a system described in a research paper, evaluating how well it works in different conditions. Potentially expanding upon or improving the previously published approach (for larger teams)
- b) Performing a survey of human attitudes towards robots, study of robot ethics or exploring the role robots can play in our society
- c) Implementing perception or navigation algorithms that aid safe and intuitive robot operation in human environments
- d) Implementing communication mechanisms that make robots more expressive and understandable by humans

It is often helpful if the project integrates a real robot, but this is not required – many projects can be carried out without access to a physical robot platform.

Important Dates:

Thu, Oct 20, 2016 Project Proposals: A 2-3 page written proposal that provides a description of the work you intend to perform, where you will perform it, questions you will be answering and details on how you will evaluate the outcomes of your work. You will present your project proposals informally to the class and receive feedback from me and your peers. A proposal template is linked to from the course website.

Tue, Nov 15, 2016 Project Checkpoint: A 2-3 page interim report on your project, including a description of the results of your preliminary findings, any revision to the design, further steps, etc.

Thu, Dec 1 2016 and Tue, Dec 6, 2016 Final Project Presentations: Each group will make a brief presentation on their project and submit a written report describing the work. Videos are strongly encouraged.

Submission of all written materials for the proposal and checkpoint are due on T-Square by 3pm on the date listed above. All written and presentation materials for the final presentation are due on T-Square by 7pm on Tuesday December 6th.