Algorithmic Human-Robot Interaction

Goal Interpretation and Expression System Design Workshop Part III

CSCI 7000

Prof. Brad Hayes

University of Colorado Boulder

Use this time to begin your project writeup:
Introduction and Motivation Sections

No Class Next Week

Classes cancelled
3/12 and 3/14
due to the
HRI Conference

Format for a Research Paper

Abstract
- One paragraph summary of the work, insight, and main result.

Introduction
- Motivate your problem, state why is this hard, state what a solution gives us, end with short bulleted list of main contributions (usually 1-3 bullets, 1 sentence each)

Background and Related Work
- What have other people done in this space? 1-2 sentence summaries of a handful of related papers tackling similar problems. Identify technical gap: what's missing?

Main Contribution
- Describe your algorithm and key insights into solving the problem

Evaluation
- How do you know if your solution works? How is it better than existing approaches?

Conclusion and Future Work
- Summarize your paper in a paragraph, identify some next steps / problems you didn't solve.
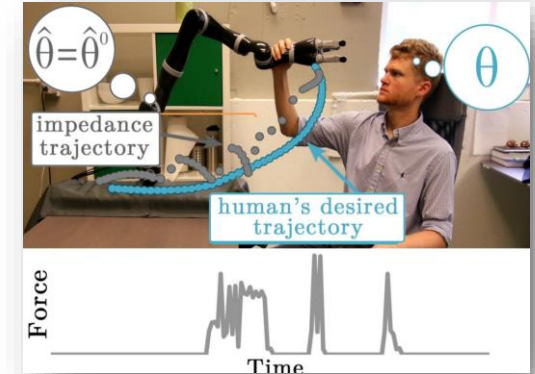
Quiz

(10 Minutes)

Papers for Today:
Interpreting and Expressing Goals

Learning Robot Objectives from Physical Human Interaction
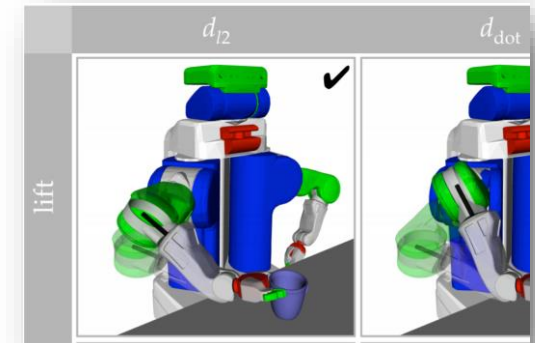– Bajcsy et al.

Pro: Lakhan Kamireddy
Con: Chandan Naik

Expressing Robot Incapability
– Kwon et al.
Pro: Dhanendra Soni
Con: Shohei Wakayama

System Design Workshop (Part III)

Finish defining the major components of your project

If already done, begin designing your evaluation!

Deliverable: Block diagram with details for each component

(Powerpoint slide deck is generally the easiest format)

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Submit on Moodle by Friday