CS 4610/5335 — Lecture 20 Supervised and imitation learning

Lawson L.S. Wong Northeastern University 4/13/22

Material adapted from:

- 1. Robert Platt, CS 4610/5335
- 2. Florian Shkurti, U. Toronto CSC2626

Announcements

Ex5 due 4/15 (Fri)

- Will discuss more in a bit

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Project presentations:

- 4/27 for CS 4610 (including majority CS 4610 teams)
- 5/2 and 5/4 for CS 5335
- ~15 minutes per team
- We do not expect everything to be completed yet
- Tell an interesting story (the process)

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Project report:

- Draft (optional but recommended) due 4/30
- Final report due 5/6
- More guidelines / suggested to be posted

Distinguished Lecture tomorrow!

Leslie Kaelbling Professor, MIT EECS

Rich Representations for Rational Robots

Thursday, April 14 1:30 – 2:30 PM 102 West Village H Go in person if you can!



Register: https://www.khoury.northeastern.edu/event/distinguished-lecturer-leslie-kaelbling

"For robots to operate flexibly and intelligently in complex domains over long horizons, they will need to learn, represent and "reason" with information about objects, space, physics, geometry, and people."

"Her goal is to make robots that are as smart as you are."

Outline

Ex5 discussion

Brief primer to supervised learning

Case study: Grasp pose detection

Learning for action: Imitation learning

Feedback

Piazza thread: 4/13 Lec 20 Feedback

Please post your answers to the following anonymously.

- 1. What did you like today?
- 2. What was unclear?
- 3. What would you like to hear more about?
- 4. Any additional feedback / comments?