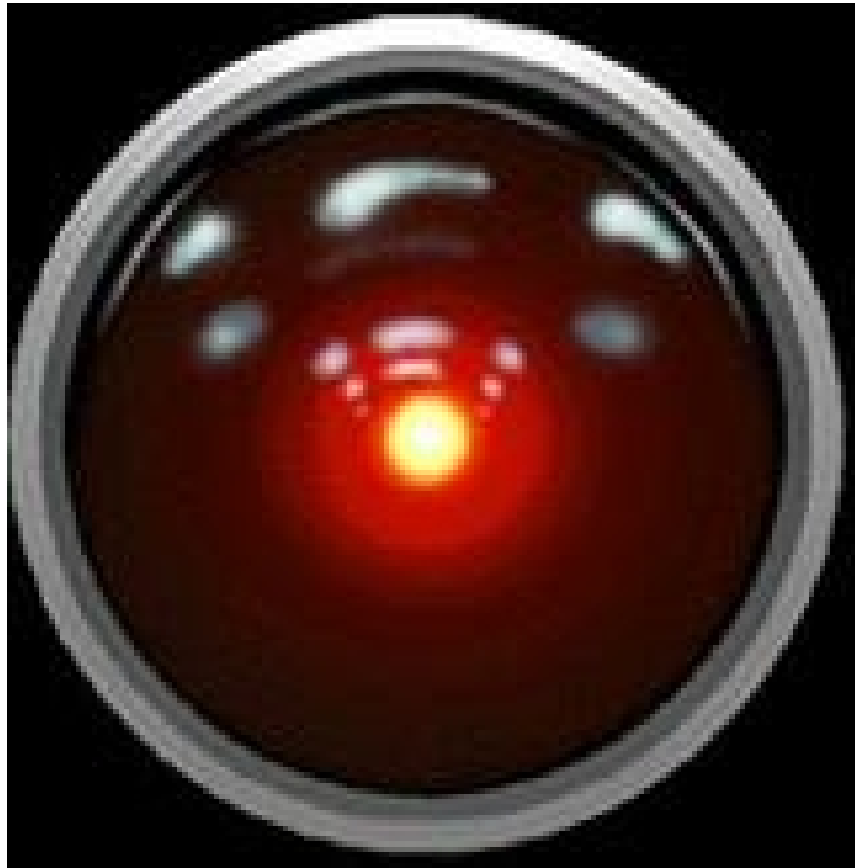




CS 378: Autonomous Intelligent Robotics FRI-II

Instructor: Jivko Sinapov

http://www.cs.utexas.edu/~jsinapov/teaching/cs378_fall2016/

Today: Robot Demos and Q&A

Announcements

Written Project Proposal

- Due **Thursday, Sept. 30**
- Send PDF to me by email with subject “FRI Project Proposal”
- CC all authors
- Proposals will be posted on class website
- You will peer-review 2 other proposals

Project Proposal Guidelines

- **Length:** 5-6 pages (-1 if working alone, +1 if in a group of 4)
- **Recommended sections:** Abstract, Introduction and Related Work, Problem Formulation and Technical Approach, Evaluation and Expected Contribution
- Your proposal must define your metric for success: how do you plan to evaluate your approach?

Next week...

- Tuesday, Sept. 20: no class, career fair
- Thursday, Sept 22: ML and RL (part 3)

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To make up for Tuesday, your group should meet for 1-1.5 hours in the lab to work on your project

Reading Assignments

“A survey of robot learning from demonstration”. Brenna D. Argall, Sonia Chernova, Manuela Veloso, and Brett Browning. *Robotics and Autonomous systems* 57, no. 5, pp. 469-483, 2009.

"Using Geometry to Detect Grasp Poses in 3D Point Clouds". Andreas ten Pas and Robert Platt. International Symposium on Robotics Research (ISRR), Italy, September 2015.

“Robot Kinematics: Forward and Inverse Kinematics”, (Ch.4) Serdar Kucuk and Zafer Bingul

...or, pick an article of your own choosing

Additional “Robot” Office Hours

- Tuesdays 11 am – 12:30 pm
- Fridays 11 am – 1 pm
- Wednesdays 2 pm – 4 pm
- The purpose of these office hours is for you to use the robots, especially the arm robot, under loose supervision

Today: Robot Demos and Q&A

Setting up our codebase

- <https://github.com/utexas-bwi/bwi>
- https://github.com/utexas-bwi/segbot_arm

Robot Q and A

- How does the robot do X?
- Can the robot do X?
- Which software package does X?
- How can I make the robot do X?

Elevator Trip

Now let's make the robot take the elevator...