

# 6.141/16.405J Robotics: Science and Systems I

## Spring 2010 Debates



### RSS Debate

A robotics debate team will consist of two teams of students debating a proposition which the teams have selected in advance. Most teams will be 2-person teams. (There are 10 propositions and 39 students, so either there will be one 1-person "team," or one person will volunteer to be on two 2-person teams.)

Each student will sign up to argue the "pro" or "con" position for a topic of your choice. Sign up is first-come, first-served. Please send your sign-up requests to Bryt ([rss-webmaster@csail.mit.edu](mailto:rss-webmaster@csail.mit.edu)).

Each debate will be 24 minutes long. The two partners on each side should jointly prepare a 7-minute argument to be presented orally (as a team) in front of the class, and be prepared to deliver a 3-minute rebuttal. There will be 4 minutes of questions from the staff and audience.

Debaters should prepare presentation materials before their presentation. Slides would be appropriate; there are a number of suggestions for creating effective slides at <http://courses.csail.mit.edu/6.141/spring2010/pub/debates/Debates.html#slides>. These slides must be provided to the course staff (via the class wiki) before your debate session so that they can be loaded onto a single machine for display.

### Grading of Debates

1. The debates will be graded (students who do not show up for an assigned debate will receive a failing grade).
2. The jury (the class) will discuss the debate afterwards. During this discussion, the jury may cross-examine the debaters, and the debaters may cross-examine each other. That is, during this time, the debaters can (and should) continue to press their points.
3. Your grade will be based on your argument, oral presentation, and presentation materials as evaluated by the course staff.

## Debate Topics

These debate topics do not reflect the staff's judgment or opinions about which research directions should (or should not) be followed; rather, they have been chosen solely in order to provoke controversy and stimulate thoughtful discussion.

1. Robots should be developed to replace humans in the performance of dull, dirty and dangerous jobs, even if this means that humans will lose those jobs.
2. For use in military or police actions, robots should have the ability to autonomously discharge deadly weapons against people.
3. Robots should employ task-specific knowledge in order to minimize the number and variety of sensors required for a given task.
4. Roboticists should, and eventually will, converge on deliberative rather than reactive architectures for reliable performance of real-world tasks.
5. As robots become anthropomorphized (or even animal-like) to ever-greater degrees, humans will eventually come to regard them as capable of feeling pain, and will institute laws for their protection analogous to laws forbidding cruelty to animals.
6. Roboticists should explicitly curtail their activities, in order to prevent the emergence of robots that are as intelligent and powerful as humans.
7. Experience manipulating the world is required in order to develop or exhibit human-scale robotic intelligence.
8. Robust robot behaviors will become achievable only when large, complex software systems can be verified as bug-free.
9. Health service robots for the elderly and infirm will never be able to replace human caregivers in all of their tangible and social dimensions.
10. People will not accept robots in their midst until they feel that the robots can be trusted.