

NATIONAL UNIVERSITY OF SINGAPORE

School of Computing

C S S E M I N A R

Title: **Advanced Robotics Center Colloquium: Making Robots Behave**

Speaker: Professor Leslie Kaelbling
 Massachusetts Institute of Technology

Date/Time: 21 January 2016, Thursday, 03:00 PM to 04:30 PM

Venue: Video Conference Room, COM1-02-13

Chaired by: Dr Hsu, David, Professor, School of Computing
 (dyhsu@comp.nus.edu.sg)

There will be time for interaction with the speaker at the end of the seminar. Light refreshments will be served. Please register at <https://goo.gl/ECeGMU>

Abstract:

The fields of AI and robotics have made great improvements in many individual subfields, including in motion planning, symbolic planning, probabilistic reasoning, perception, and learning. Our goal is to develop an integrated approach to solving very large problems that are hopelessly intractable to solve optimally. We make a number of approximations during planning, including serializing subtasks, factoring distributions, and determinizing stochastic dynamics, but regain robustness and effectiveness through a continuous state-estimation and replanning process. This approach is demonstrated on a PR2 robotic system which integrates perception, estimation, planning, and manipulation.

Biodata:

Leslie Pack Kaelbling is the Panasonic Professor of Computer Science and Engineering at the Computer Science and Artificial Intelligence Laboratory (CSAIL) at the Massachusetts Institute of Technology. She holds an A.B in Philosophy and a Ph.D. in Computer Science from Stanford University, and has had research positions at SRI International and Teleos Research and a faculty position at Brown University. She is the recipient of the US National Science Foundation Presidential Faculty Fellowship, the IJCAI Computers and Thought Award, and several teaching prizes and has been elected a fellow of the AAAI. She was the founder of the Journal of Machine Learning Research.

Directions:

Map location for the School of Computing (COM1): <https://goo.gl/maps/BQ3vT>
The seminar room is located on the 2nd floor.