What methods that we have previously seen in this class would be involved in robotics?

Answer: Particle filters, HMM, MDP, RL, machine learning, computer vision, and pretty much everything else!

Name a useful task that you think would be possible to assign to robots.

Answer: Disaster rescue, spying, exploring dangerous environments, construction/assembly, farming, surgery, driving cars, flying (easier!), haircuts, household chores (including food), assistance to the needy, entertainment.

Which parameters do you have in the dynamic state of the roomba?

Answer: All the kinematic parameters, plus forward velocity and turning (yaw) rate.

How can we use the dynamic state parameters to estimate the current robot state?

Answer: We multiply movement parameters with time passed to estimate the new kinematic state.