Purpose: Robots!

Summary: You'll use the Pyro environment to learn how to program simple behaviors in simulated robots.

Details:

**Pyro Documentation**
For a series of tutorials/exercises on Pyro, go to:

- [http://pyrorobotics.org/?page=PyroCurriculum](http://pyrorobotics.org/?page=PyroCurriculum) (go to the “Modules” section near the bottom of the page)
- [http://academic.bowdoin.edu/courses/f04/csci320/pyro_intro/Self_Paced.html](http://academic.bowdoin.edu/courses/f04/csci320/pyro_intro/Self_Paced.html)

**For Today’s Lab**
Program a robot to do something “interesting.” It should ideally be something that is simply a combination of rotation and translation, possibly in combination with the “sleep” commands and Python’s control operators. For instance, can you design a robot that “spells out” your name in block letters? E.g., to make a “Y” it traces out the bottom vertical line of the “Y”, then the left arm of the top of the “Y”, then backtracks to the center, then traces out the right arm of the “Y”. Then it pauses before writing the next letter, etc. (I feel sorry for you if you select this and your name is Murgatroyd or something.)

If you want to learn about sensors, look at the examples that use the “range” attribute of the robot; however, use of sensor data is not needed for this afternoon’s lab.

**Hemisson**
If you want to try something out on the Hemisson, first show me a working simulation; then we’ll try to schedule you some time using the real robot.

**Environments**
You can design your own environments for the simulated robots. Use the “Edit” button to examine some of the existing robot “worlds” for examples of how this is done.