

Robotics Workshop

July 21-23, 2003

Welcome to the Robotics Workshop! Our goal is to expose you to the exciting field of robotics. Over the course of the next three days you will build and program robots using the Lego Mindstorms Robotics Invention System set, and visit robotics labs at Rensselaer Polytechnic Institute.

Workshop Overview

- **Monday (July 21):** You will build the Roverbot (or the Acrobot) in the Constructopedia and work through the Mindstorms tutorial to learn how to program the robot. The Roverbot can be built to have different means of locomotion – with wheels, with legs, or with treads.
- **Tuesday (July 22):** You will learn to program your robot so it can use its sensors. Programming the robot so it has the ability to reverse direction when it runs into obstacles is going to be your challenge.
Lab Tour: On Tuesday afternoon, we will go on a tour of robotics labs at RPI from 1pm to 3pm. Remember to bring lunch!
- **Wednesday (July 23):** We will select a project for you to work on so you can design, build, and program a robot. For example, consider how you would create a hospital drug delivery robot (your robot can deliver M&Ms) or a robot that detects motion (so you know when your front door is being opened) or any other robot that you can dream up!

Workshop web page: Workshop information and links to online Lego Mindstorms resources are available at

<http://www.cs.rpi.edu/~sakella/mindstorms/>

Lego Robotics Workshop Team:

Mayur Patel, Wes Huang, Ben Potsaid, and Srinivas Akella (RPI)

Lourdes Lejano, Teresa Davis, and Jenn Novak (Junior Museum)

Questions?

Please contact us if you have any questions.

Organizers:	Srinivas Akella	Jenn Novak
	Rensselaer Polytechnic Institute	Troy Junior Museum
Email:	sakella@cs.rpi.edu	jnovak@juniormuseum.org
Telephone:	(518) 268-8770	(518) 235-2120, ext. 216