

Homework 1

15-491: CMRoboBits

1 Introduction

The purpose of this initial assignment is to familiarize yourself with how to build, edit, and run code for the robots. Additionally, you will explore some of the sensors that will be available in future assignments.

2 Optional: Install the OPEN-R SDK on your own laptop

Since we only have a few shared laptops in the lab, people with laptops probably want to install the OPEN-R SDK on them to avoid waiting for one of the shared machines. We recommend installing under Linux if that's at all possible; it's the only thing we have experience with. On the other hand, people have used the SDK under OS X and Windows. It's possible, but we don't know the details and can't help you with them.

- Go to: <http://openr.aibo.com/>
- Pick a language, register, and log in
- Feel free to look around a bit
- Go to the Download area
- Download [assuming Linux]:
 - OPEN-R SDK (top of list)
 - Remote Processing OPEN-R patch for GCC3.2 on Linux
 - OPEN-R SDK Documents English
 - gcc source files (very bottom of list)
 - binutils source files
 - newlib source files
 - Shell script for building cross development tools
- Pop open your terminal of choice and cd to the download directory.

- `tar -zxvf OPEN_R_SDK-1.1.3-r2.tar.gz`
- Become root
- `mv OPEN_R_SDK /usr/local/`
- `chmod +x build-devtools-3.2-r1.sh`
- `./build-devtools-3.2-r1.sh`
- Wait a really long time while your cross-compiler builds