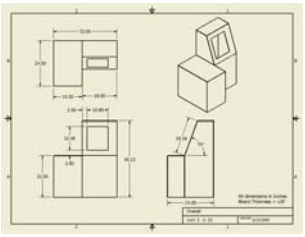
G.I.R.L. TECH NEWSLETTER #2

Hello interns and parents! This is the second of our weekly newsletters to keep you up-to-date with what is going on in the G.I.R.L. Tech internship program. Starting next week we will begin sending out these email updates regularly on Friday afternoons so you have time to read them over the weekend. If you are not currently receiving our newsletter and would like to be added to the distribution list, contact Laura Lantz at lantz@cmu.edu.

PREVIOUS WEEK IN RECAP



Last Monday our interns built a full sized cardboard mock-up of the Children's Museum exhibit to get a sense of how big the finished exhibit will be and to help prepare for building the real thing. Each of us was responsible for measuring and cutting out a different piece of the exhibit cabinet based on a set of blueprints. When all the pieces were cut, reinforced, and labelled, we joined them together using duct tape. All our measured pieces matched up pretty well in the end! The core team used the mock-up in our ½ semester presentation as a visual aid to show other ETC students and faculty the Children's Museum exhibit's planned size and layout.

On Wednesday, we met with robotic toy makers **Bossa Nova Concepts** (www.bnconcepts.com) to talk about robotics in the toy industry. Bossa Nova Concepts' David Palmer gave a presentation about the process of adapting research robotics for consumer-level applications and spoke about different careers involved in creating and marketing robotic toys. We then got to see Penbo, a robotic penguin toy that is not yet available on the market. Our interns brainstormed different concepts for future robotic toys to appeal to young girls and rated a variety of potential toy characters on their cuteness. Bossa Nova Concepts will be drawing on our ideas and opinions as they work to develop future robotic toys for girls!

COMING UP THIS WEEK

It's the week you've been waiting for! Tomorrow we start getting our hands dirty with actual programming and mechanical engineering.

For interns who want to get involved in programming, we will introduce the programming language Python (http://www.python.org/) and begin learning how to use it with the free open source game and simulation engine Panda 3D (http://panda3d.org/). After getting comfortable with these tools we'll use Python to write programs for the Children's Museum robotic painting arm and test the programs with a virtual robotic arm in Panda 3D.

For interns interested in mechanical engineering, we will introduce the Robotis Bioloids Kit, a hobbyist and educational robot kit, and begin learning how to put together robotic arms similar to the one used in the Children's Museum exhibit. After getting comfortable with the kit we will experiment with circuits and sensors and figure out what sensors we need to incorporate into the Children's Museum exhibit.

GENERAL ANNOUNCEMENTS

We are planning a congratulatory ice cream social for the final day of the G.I.R.L. Tech internship program, on May 6th. In order to participate in the ice cream social you need to attend at least nine out of the twelve regular Monday/Wednesday G.I.R.L. Tech sessions between tomorrow (Monday March 23rd) and May 6th. In addition, you need to document your internship experience by writing a journal entry and posting a blog entry for every session you attend. We look forward to celebrating with you!