

Barrett Technology Robotics Software Project: Pravina Samaratunga

This past summer, I worked full time for nine weeks as a NSF funded software engineering intern at Barrett Technology, a robotics firm in Cambridge, MA. It was a fantastic opportunity in that I was able to do hands-on work with the robots themselves. Together, four interns, myself included, were tasked with creating a GUI and a Python API to manipulate the company's robotic hand.

I was personally responsible for a substantial portion of the API, as well as parts of the GUI itself. My main concentrations in the GUI were in the "Maintenance" and "Force-Torque" tabs. However, each of us was involved in every part of the GUI, so I played a role in the development of each file.

We had designed the interface from scratch as a team. By the time I completed my internship, the GUI was ready for an official Barrett release. We called our finished product pyHand, as it was written in clean python code. All my code contributions to the project are located at the svn site below:

http://web.barrett.com/svn/bhand/tags/pyHand_1.0/

A substantial majority of the code in the following URLs were my work:

http://web.barrett.com/svn/bhand/tags/pyHand_1.0/pyHand/force_torque_tab.py

http://web.barrett.com/svn/bhand/tags/pyHand_1.0/pyHand/maintenance_tab.py

All files in the following URL were exclusively written by me:

http://web.barrett.com/svn/bhand/tags/pyHand_1.0/examples/

My direct supervisor was Peter Botticelli. I have therefore asked him to provide an additional letter of recommendation in this regard.