Memo

**To**: Dr. Luis Rodriguez

**From**: A.R.C. - Logan Beaver, Justin Campbell, Tyler Paddock, and Ron Shipman

**Date**: January 9, 2015

**Re**: A.R.C.’s Update for Week 4

**Problem Statement:**

Milwaukee School of Engineering (MSOE) participates in community outreach programs where science, technology, engineering, and mathematics (STEM) topics are demonstrated to encourage younger generations to enter into STEM based degrees and careers. Having an automated control system to demonstrate and interact with would increase the excitement at these outreach programs. Development of a robot with pneumatic locomotion for the Milwaukee School of Engineering’s controls classes would give students a first-hand experience with complex control systems.

**Last Week’s Accomplishments:**

* + Finished Equation derivation and integrate them with simulation
  + Communication System Base Software Architecture Created
  + Excel Sheet of Component Masses created and populated
  + Powerpoint Presentation Slides Created

**Goals for Break:**

* + Synthesize shoulder joints
  + Develop robot wireless control mechanism
  + Upload masses and moments for robot components
  + Materials research for chassis/mounting bay
  + Begin work on powerpoint presentation

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| **Date** | **Person** | **Task** | **Time [Hours]** | **Total Man-Hours** |
| Over Break Weeks | Logan | Equations and Modelling | 2 | 27 |
| Over Break Week | Logan | Lagrangian Mechanics Research | 4 |
| Over Break Weeks | Ron | Leg Designing  Materials Research | 5 |
| Over Break Weeks | Justin | Leg Designing  Chassis Update | 4 |
| 1/8/2015 | Logan, Tyler | Software and Modelling meeting | 1 |
| 1/5/2015 | Tyler | Communication System Work | 2 |
| 1/1/2015 – 1/8/2015 | Team | Powerpoint Presentation | 2 |