Weekly reports are to be emailed to atbecker@uh.edu by 5:00pm on Tuesdays. The purpose of a weekly report is to: (1) give you text and images for your papers, thesis, and dissertation, (2) document progress, (3) identify if you are stuck or need resources.

Weekly report

1. **My *Goals* from last week**
    - **Deliverable 1:** Build hardware connections for power supply to coils and controllers. - Complete
    - **Deliverable 2:** Write MATLAB script to which tracks sphere and overlays position on raw video feed. - Complete
    - **Deliverable 3:** Test MATLAB 2015b on workstation and ensure all needed hardware is supported - Complete
2. **My *Accomplishments* this week**
    a. Project 1: Magnetic Coil Control for Mico robots
        - **Deliverable 1:** Write MATLAB function to to interface with Arduino and current controller. Use door magnet/latch as test load. Also, check for full range of controller – FULL REV, STOP, and FULL FWD – Complete and tested SAT.
        - **Deliverable 2:** Write MATLAB function for PID controller – Progress
        - **Deliverable 3:** Embeed functions mentioned above in tracking loop for object detection and test – In Progress.
        - **Deliverable 4:** Connect lead-acid battery to current controller with required cabling – Test this Friday.
        - **Deliverable 5:** Upload code to GitHUH – Complete.

- **3. My *Goals* for Next Week.**
    - Objective 1: Test MATLAB loop and tune PID controller for sphere tracking
    - Objective 2: Build frame and power supply for coils.

3. **What I need Dr. Becker to do:**
    a. Assist with debugging script as needed.
    b. Buy a deep cycle marine battery with a large reserved capacity. This is a better choice than an auto starting battery.