

## **Project Bi- Weekly Progress**

**Date: 02/27/2014**

**Project Title: Robo-Ops**

**Students Names: Boris Barreto, Jason Brown, Justin Houdeshell, Linus Nandati, Tsung Lun Yang**

**Mentors/ Coordinator/ Sponsor: Dr. Jonathan Clark**

**1. Project Title: Project 11 – Robo-Ops**

**2. Project Objectives/tasks Breakdown:**

**Overall Objective is to have a robot capable of winning the 2014 Rasc-al Robo-Ops Competition**

**Tasks**

**Develop robotic arm of scale for future Robo-Ops Team**

**Create video demonstrating rover capabilities**

**Develop controls code which could be implemented with future designs**

**3. What was accomplished the last two weeks on individual tasks- representative supporting data/ documents**

**Team was able to take a major step forward with developing the code for control using an x-box. We had been attempting to work with the SDL library, but had struggled to utilize it on the Raspberry Pi. A friend suggested using getch(), which once we worked through the implementation and bugs with using getch(), we were able to produce the Dynamic Control we desired.**

**The team was also able to manufacture the various parts of the robotic arm and is finishing assembly this week. The programming encountered a slight snag. We are switching from using a microprocessor to a motor controller to handle the motors. Some of the functions are working with the motor controller, but the function we would like is not functioning.**

**4. Summary of problems encountered and actions taken (and by whom**

**5. Attached Gantt chart modifications and analysis if project is behind schedule and summarize actions planned to overcome the problems)**

**6. Work planned for the next period and the person(s) responsible:**

**Tasks**

- **Complete Manufacturing of Robotic Arm**
  
- **Refine Second Generation Method for x-box control.**
  
- **Continue Programming Arm**

**Boris – Continue refining Second Generation**

**Jason – Work on Programming Robotic Arm**

**Justin – Work on completing manufacturing of arm**

**Linus – Assist with Controls Programming**

**Tsung Lun – Work on Completing Manufacturing of Gripper**

**7. Open comments/suggestions (Please feel free to include your private comments):**

**Coordinator/ Instructor assessment report and corrective action**

