1.) Write a brief outline of your research plan:

  Working with my mentors I will help build an auto-stabilizing camera gimbal that can be used to point the camera straight down or onto a specific object. It will utilize a range of orientation sensors and PID control to smoothly work.

  Ultimately this project will help reach the ultimate goal of a full autopilot system for a solar plane.

2.) What do you hope to learn and achieve by the end of the semester?

  I hope to learn more about C++ since it is the primary language used in this project. In addition, I hope to better my skills in hardware design, and different applications of PID and other control systems.