**Semester Project Proposal**

For my semester project I’d like to build a demo consisting of a platform mounted on a pivot point like a seesaw and control the position of a ball set on top. This would be a good platform to test different control strategies and compare their performance to a disturbance. I’d like to compare the traditional PID control to whatever new strategies we learn about in this class that implement more robustness and then compare how both control methods react to pushing the ball from its intended position. I’d like to make this comparison by using video so that if the differences are subtle, they can still be captured by a slow-motion video.

TYPES OF CONTROLLERS TO USE:

* PID without dynamics
* PID with simple dynamics
* H\_3
* H\_inf