

Feedback Systems: An Open Design Project

Introduction:

In the Design Project project you will first decide on a feedback control project that of interest to you. This design will be:

- A full system, including a physical system and the sensors/actuators to make it work.
- You will simulate your design in MatLab/Octave including:
 - All subsystems and the equalizer designed to make the system stable with good performance.
 - The simulation should introduce an adjustable amounts of Gaussian white noise as a disturbance.

Deliverables (Team uploads to Blackboard):

- 1. Project Definition:** Identify your team (2 members) and define your system choices.
- 2. Full Project Report:** including plots of your simulation results as well as documenting your design objectives and chosen solutions.
- 3. Simulation Files:** Such that your simulation can be run by others.
- 4. PowerPoint-based presentation:** covering your system and results. Both team members should take part in the presentation.

The presentations will take place in-class during the last weeks of class and during Finals week.