

EE576 Class Project

- ❖ For the class project, pick a realistic example application from a project you may be familiar with or a published article (a textbook example is not acceptable) and perform its complete analysis as witnessed in the class, such as:
 - (i) modeling (input/output, state-space, time vs. as freq. domain; if applicable start with cont.-time model and then develop the discrete-time model),
 - (ii) stability analysis (using bilinear transform and RH test, Jury test),
 - (iii) control design (simple gain using root-locus, using phase-lag/lead, PID, state-space methods, LQR etc.),
 - (iv) observer design (including Kalman filter),
 - (v) simulation/implementation in matlab/simulink.Etc.

- ❖ Please discuss your project topic as you decide, so I can approve it.

- ❖ There will be project presentation in the last few weeks of the class.

- ❖ A project report will be due in the finals week.