

ASEN 5044 Statistical Estimation for Dynamical Systems
Spring 2020

Project Progress Report - Part 2

Out: Tuesday 4/14/2020 (posted on Canvas)

Due: Tuesday 4/21/2020, 5:00 pm: **GROUP SUBMISSION TO CANVAS!**

(only one group member needs to submit, but all group member names should be listed on page
1 of the document)

*You are to submit solutions as a project group and will receive a group grade for this homework assignment. Show all your work and explain your reasoning. **Note that this is a part of the final project, you will develop code needed for the final project – so read, think and plan ahead to organize, comment, modularize, and re-use your code! Good basic programming practices will save you a lot of time and effort!!***

This is a part of the final project, we expect a typed report, written professionally.

NONLINEAR FILTERING:

1. Describe your status in implementing The LKF and EKF.
2. Provide the plots as described in the project assignment, namely a single 'typical' simulation instance, NEES and NIS tests, for both the LKF and the EKF. You can use these plots to explain your challenges in moving forward.

We do not expect all filters to be calibrated and working perfectly at this stage, uncalibrated plots are acceptable. We ask for the plots to try to understand your project status.