ETH

Eidgenössische Technische Hochschule Zürich
Swiss Federal Institute of Technology Zurich

Institute for
Dynamic Systems and Control

IDSC

Institut für Dynamische Systeme
und Regelungstechnik

151-0566-00   **Recursive Estimation** (Spring 2021)

Programming Exercise #1-2   Topic: Filtering

Issued: May 5, 2021   Due: **June 2, 2021**

Deliverables

Note: Your submission has to follow these instructions exactly. Submissions that do not conform will have points deducted.

Up to three students are allowed to work together on the programming exercise. They will all receive the same grade.

As a group, you must read and understand the ETH plagiarism policy here: `http://www.plagiarism.ethz.ch/` – each submitted work will be tested for plagiarism. You must fill out the *Declaration of Originality*, available here: `https://tinyurl.com/ETHDeclarationOriginality`.

Hand in a single zip-file, where the filename contains the names of all team-members according to this template (note that there are no spaces in the filename): `RE21_Firstname1Surname1_Firstname2Surname2_Firstname3Surname3.zip`.

The zip-file contains the `RE21_Firstname1Surname1_Firstname2Surname2_Firstname3Surname3` folder (with the correct names as in the zip filename), that you find among the material provided. This folder contains two subfolders:

1. The subfolder `P1_EKF` contains only two files:

   - Your implementation of the EKF in the single file `Estimator.m`, which has the exact same function definition as in the provided template.

   - A scan of the *Declaration of Originality* (for the first problem), signed by all team-members.

2. The subfolder `P2_ParticleFilter` contains only two files:

   - Your implementation of the PF in the single file `Estimator.m`, which has the exact same function definition as in the provided template.

   - A scan of the *Declaration of Originality* (for the second problem), signed by all team-members.

Send your zip-file in a single email:

- Use this *exact* subject: `programming exercises submission`

- In the email body, include a list of all team-member names.

- Send the email to `recursiveestimation@ethz.ch`.

You will receive an automatic reply confirming receipt of the email. A human will not look at the email before the deadline expires, and you are ultimately responsible that we correctly receive your solution in time. **Late submissions will not be considered, nor will submissions where the attachment was forgotten.**