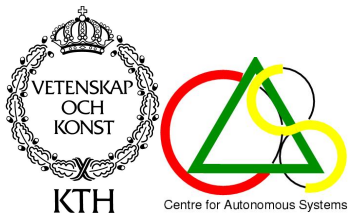
EL2320 - Applied Estimation Admin

John Folkesson

Course Details



Course Info

- Lecturer: John Folkesson, johnf@csc.kth.se
- Assistant: Urban Eriksson, urbane@kth.se
- Credits 7.5hp:
- Bilda
  - CANVAS: https://kth.instructure.com/courses/3368
  - Assignments, papers, these slides, ...
  - log in with you kth.se account.

Grades

Required for passing (grade=E) is a passing grade on the following four items (3 moments):

- Labs 1 and 2 (PRO1 in Ladok)
- Project or Literature Report (PRO2 in Ladok)
- Exam (TEN in Ladok)

Grades

- The project which will be described in detail in one of the later lectures.
- Undergraduates EL2320 (Master program):
  - The grade is based on the project/literature report which is then averaged with your exam grade.
  - Your are required to write a report that can be on a programming project or a literaure study. The programming project gives grades A-E while the highest grade for a literature study is C.
  - So for example a C on the report maps your exam to final grade thus: $A- > B, B- > C, C- > C, D- > D, E- > D$.
- Graduate Students EL3320:
  - You must achieve 80% on the exam and a B on the project to recieve a passing grade. You are expected to either work alone on the project or do a more extensive one.

Grades

- Labs are required and graded pass/fail.
- Labs are done individually.
- Passing the Exam is also required.
- The project is half the grade (EL2320) along with the exam grade.

Labs

Labs are in matlab. A lecture will introduce each lab with a discussion of the theory part. You are expected to have prepared the answers to the theory part of each lab as preparation to the lab discussion. Participation in these discussions gives a bonus on the exam along with feedback on your answers.

- First lab will cover the EKF, discussion Nov 9, due Nov 19
- Second lab will cover the Particle Filtering, discussion Nov 20, due Dec. 1.

- On time **completion** of each lab gives a bonus point as well.
- Bonus points will expire after the first re-exam (omtenta) following our regular exam.

Help

There will be help sessions thte following times:

- Fri Nov 10, 10:00-12:00. L43, Mostly Lab 1, and EKF
- Thu Nov 16, 10:00-12:00. D42, Mostly Lab 1, and EKF
- Thu Nov 23, 10:00-12:00. D42, Mostly Lab 2, and PF
- Thu Nov 30, 10:00-12:00. E34, Mostly Lab 2, and PF
- Thu Dec 7, 10:00-12:00. E36, Mostly Projects and Exam

Project

Done in groups of 2 with exceptions of 1 or 3, (PhD student normally are 1). Project or literature reports are written individually.

- Projects Description (due Dec. 3).
- Project Report and Code (due Jan. 19)

Excercise from Jude Carroll

- Teachers instructions were that students could collaborate, but should each hand in an individually written report.
- When is it an attempt to deceive? (number 1 13 next page)
- Dont answer out loud, think for yourself.

1. The 3 students discuss the task with other students.
2. They look at past examples of similar student reports.
3. They discuss together what is good and bad about the reports.
4. Individually, choose the same topic. Decide to share ideas.
5. All do general research. Each choose one aspect to go in depth. Everyone makes notes.
6. They meet and report orally on their findings.
7. They exchange research notes on what they have found so far.
8. One then does more research. He collects a lot of deep information about the specific topic and shares the notes.
9. The same person as (8) makes sections, writes the headings for each. He gives the rest a copy.
10. They share out writing for each section from (9).
11. They all brainstorm the conclusions.
12. Each person takes the sections written by others + the group conclusions and then writes an individual final version. No one changes more than 5% of the others words.
13. Each student submits a final version and sign a paper that says, "This is my own work".

- Every teacher has a different opinion on this. Mine counts here and the answer for the project is at 8.
- The project also has a large part implementation in code and some experiements with should definitely be shared evenly and common to all. That means that figures and movies might be shared as well.
- Absolutely no colarboration on the writting. Your report is strictly between me and you and should not be shown to your partners before the deadline.
- That means if one group member has a poor understanding it will show up in his report. Also you are free to research more literature than your partners (perhaps during the writting phase) which you should not then share. All preparation research should be shared.

Some kinds of Plagiarism

These are not only my rules:

1. Copying text and not rewriting (unless you use citation marks and give the reference)
2. Using someone else's figures without reference (also potential copyright issues).
3. Not showing your sources/references (Very Important) So changing the words still requires a reference.
4. Using someone elses results
5. Falsifying data
6. Resubmitting an article with new title and authors

Lots of references makes your report stronger so not giving them is not only wrong but lazy and dumb too. There is no benefit in not giving the references. (Unless you are trying to take credit for the ideas and results. Here I do not expect any new ideas but rather a report on the state of the art.)

What about the labs

- Here I am mostly concerned with having you get the code to work and showning that you understand it.
- How you achieve that is up to you.
- Mindlessly copying anothers work and submitting it as your own is clearly an 'attempt to decieve'.
- Asking for help when you are stuck is encouraged but you have to understand in the end.

Book

Probabilistic Robotics by Sebastian Thrun, Wolfram Burgard, and Dieter Fox.
Reading for each lecture is expected!