DD2301 Program Integrating Course in Machine Learning 3.0 credits

Programsammanhållande kurs i maskininlärning

This is a translation of the Swedish, legally binding, course syllabus.

If the course is discontinued, students may request to be examined during the following two academic years

Establishment

Course syllabus for DD2301 valid from Autumn 2015

Grading scale

P, F

Education cycle

Second cycle

Main field of study

Computer Science and Engineering

Specific prerequisites

Language of instruction

The language of instruction is specified in the course offering information in the course catalogue.

Intended learning outcomes

As student at KTH:

To pass the course, the students should

â€¢ have been informed about course choices they made during their studies and reflected over why they made them,

â€¢ have been informed about the expected content of the masters degree project and the opportunities available to them

Ethical considerations

To pass in the course, the student should

â€¢ be aware of the ethical issues that are associated with "big data" and the choices about the gains and losses made when mass data about people is made available

â€¢ be aware of the responsibilities when presenting machine learning results/algorithms to the public,

â€¢ be aware of the responsibilities of drawing conclusions from experimental results.

As a future professional machine learning scientist

To pass the course, the student should

â€¢ be aware about how machine learning is used and be utilised outside the academic world and the consequences this has for the society and the professional responsibilities as a machine learning practitioners.

â€¢ be more aware of workplaces and professions available for them as machine learning graduates.

Course contents

â€¢ The logistic and experiences of a machine learning student at KTH: courses tracks and thesis project.

â€¢ Where do machine learning graduates work? Academia, industry and the public sector

â€¢ The ethics of making conclusions from experiments and results and presenting these to the public.

â€¢ Privacy, security and ethical issues around "big data".

â€¢ What machine learning can and cannot predict

â€¢ Conduct code for a machine learning scientists

Course literature

Big Data: A Revolution That Will Transform How We Live, Work, and Think by Viktor Mayer-Schonberger and Kenneth Cukier.

Examination

- UPP1 - Homework Assignments and Seminar Participation, Year 1, 1.5 credits, grading scale: P, F
- UPP2 - Homework Assignments and Seminar Participation, Year 2, 1.5 credits, grading scale: P, F

Based on recommendation from KTH's coordinator for disabilities, the examiner will decide how to adapt an examination for students with documented disability.

The examiner may apply another examination format when re-examining individual students.

Ethical approach

- All members of a group are responsible for the group's work.
- In any assessment, every student shall honestly disclose any help received and sources used.
- In an oral assessment, every student shall be able to present and answer questions about the entire assignment and solution.