



FDD3610 Deep Learning, advanced course 7.5 credits

Djupinläring, fortsättningskurs

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

Establishment

Grading scale

P, F

Education cycle

Third cycle

Specific prerequisites

Intended learning outcomes

On completion of the course, the student should be able to

- explain and justify the subareas of deep learning
- account for the theoretical background for advanced deep-learning techniques
- identify needs of additional research in the area
- implement several deep-learning methods based on new research
- analyse advanced research in the area and critically evaluate the methods' weaknesses and strengths in order to:
- be prepared for a degree projects/postgraduate studies in deep learning
- better be able to meet the industrv's need for cutting-edge competence in the area.

Course contents

Basic theory of deep networks
Probabilistic deep learning
Types of learning in deep learning
Deep learning with imperfect labels
Reliable deep learning

Examination

- LAB1 - Laboratory work, 4.5 credits, grading scale: P, F
- PRO1 - Project, 3.0 credits, grading scale: P, F

Other requirements for final grade

The final grade will be based on the project grade

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.