LD1016 Learning to learn with AI 2.0 credits

Lär dig lära med AI

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

Establishment

The official course syllabus is valid from the autumn semester 2024 in accordance with decision by Head of School : M-2024-0063. Date of decision: 2024-01-22.

Grading scale

P, F

Education cycle

First cycle

Main field of study

Technology and Learning

Specific prerequisites

General entry requirements.

Language of instruction

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

Intended learning outcomes

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

· Explain the basic principles and the technologies for generative AI such as transformer architectures, basic models and in-context learning

· Use tools for generative AI as a conversation partner to create different types of contents and process new knowledge

· Apply skills in prompt engineering to ask questions that optimise the quality and relevance of results from generative AI, and to avoid potential pitfalls and bias

· Evaluate the ethical and social consequences of generative AI such as its effect on creativity, authenticity and disinformation

• Design and carry out a personal learning plan that includes generative AI as a resource and inspiration for the student's future learning and development

Course contents

This course in artificial intelligence (AI) aims to familiarise the students with the basic principles and the concepts around the highly expansive and popular field of AI, including overviews for non-experts of historical developments in the area. The course also provides students with the opportunity to develop their self-reflection and self-analysis skills by analysing generated replies and reflect on how conversational AI can enhance the student's self-awareness. Through seminars and self-study, students are introduced to the possibilities of content creation with AI. Students also apply their critical and analytical skills to determine if AI results are reliable, unbiased and overall useful. Students reach this understanding by the means of:

· Information about the current developments in the field of AI, and research about its pedagogical and non-educational uses,

· Seminars, exercises and discussions of practical aspects of AI use, including ethical challenges,

· Practical exercises in how conversational AI can help them to identify and question existing thought structures.

Examination

• LEXA - Continuous assessment, 2.0 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.

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

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.