IN5620 Individual assignment fall 2022

Updated: 23 August 2022

In this course, there are three deliveries for the individual assignment. The first is after module 1, the second after module 2 and the third after module 3. Think of this as one document that will evolve and be updated through three iterations.

You are invited to write and draw for this individual assignment. You are further invited to discuss, present, talk about this assignment in your group and in class. You will hand in individual assignments.

1 First module - and first iteration

For the individual assignment in module 1, there are three topics:

- Concepts, definitions and history of interaction with AI and autonomous systems.
- Human Robot Interaction.
- Universal Design and Interaction with AI.

Below, the writing task for these three topics is described.

1.1 Concepts, definition and history of interaction with AI and autonomous systems

First, write a section about how AI came about, the history of AI. When, and by whom, was the term first used?

Then, find three different definitions of AI. Describe and explain these three definitions, for example by when it was defined, by whom and in what community. Based on these three definitions, make one definition yourself - and describe and explain your definition.

Write some sentences about the similarities and differences between human autonomy and machine autonomy. Write some sentences about similarities between the concept automatic and the concept autonomous.

Select one of the articles from the curriculum. Write a brief review from this article. If there is something that is unclear, or you disagree with, or that you question with the article – write about this.

Find one contemporary company that work with AI and describe how this company present AI on their web pages. In what way does this company talk about AI, as a product, as a platform, as a service, framework, as an ecology or as a “idea”?

Select one documentary or a fictional film, book or game that is about the use and interaction with AI and interaction between people and AI. Describe with your own word how human interaction with AI is portrayed in this work.

1.2 Robots and AI systems

First, write a section about how the word Robot came about.

Then, find two different definitions of “robot”. Describe and explain these definitions. Based on these definitions, make one definition yourself, and describe and explain this definition.

Discuss the relation between AI and Robots. Is “a robot” different from “an AI”? In what ways are they different and similar? Bring in the definitions that you described earlier about robots and AI for this discussion.

Find one contemporary physical robot, either described in a research article - or a commercial robot, and describe how this robot moves and how a human user is interacting and using the robot in a specific situation.

1.3 Universal Design and AI systems

Please find and describe a definition of Universal Design. Explain this definition and how you understand what Universal Design is about with respect to inclusion.

Describe the potential of AI with respect to human perception, human movement and human cognition/emotions. You are encouraged to use examples. Please provide two examples of AI systems for including “more” users.

Describe the potential of AI for both including and excluding people. You are encouraged to use examples.

In the WCAG 2.1 principles and in many of the Human AI-Interaction guidelines the concept “understand” and “understanding” is used. Explain briefly in what way you make sense of the concept “understand” and “understanding”. Then address the question: Do machines understand?

You find the WCAG 2.1 principles here:
https://www.w3.org/TR/WCAG21/

For inspiration – please have a look at these three projects:
Kunstig intelligens og sensorteknologi
Lek og lær
UD(X)=?

1.4 Guideline for Human-AI interaction

Please select one of the 18 guidelines for human-AI interaction from Microsoft, and describe this guideline with a different example than what is given by Microsoft.
Search, and find one set of HCI design guidelines. Discuss briefly similarities and differences between the HCI design guidelines and the Human-AI interaction guidelines.

You find the Microsoft guidelines for human ai interaction here:
https://www.microsoft.com/en-us/research/blog/guidelines-for-human-ai-interaction-design/

1.5 Practical information

Date of delivery: Se calendar on the course page.
We use the Vortex system for the deliveries. More information will be given on how to upload. PDF format is to be used. Name your document: "username" iteration 1.

Think of a reader when you write; the reader is a fellow student, and Asbjørn, Jo, Aslak, Trenton.
Language: Of your choice, English or Norwegian.
Maximum number of pages: 6
Make references to articles: Minimum 4.

Feedback

Feedback to another student is to be given *one week after the delivery deadline*.
Use the "two stars and a wish" structure for the feedback. Try to be specific about what you like – and why. In addition to what you think can be improved.

What to "do" with the feedback?

In the next iteration of the individual assignment, make an appendix where you first describe the feedback you have received – and then describe what you have done with the feedback that you received. Try to be specific about what you have done with the feedback.

Happy writing!