Project module description

General module information
Title: Adaptive Media Systems
Type: Project module
Language of instruction: English
Location of the lecture: Campus Copenhagen and Campus Aalborg

ECTS points: 15 ECTS

Period: 1 September 2022 — 31 January 2023

Placement
1st semester, M.Sc. in Medialogy

Module coordinator
Henrique Galvan Debarba (coordinator), Judi Stærk Poulsen (secretary)

Academic content and relationships to other modules/semesters
The formal study plan description of the module can be found here:

https://moduler.aau.dk/course/2022-2023/MSNMEDM1221?lang=da-DK

In this module, students will develop competences for creating and evaluating adaptive media systems.

Adaptive media systems can use machine learning/artificial intelligence/data-driven techniques to model users and/or their interactions with the system so as to tailor the experience specifically to the user, or otherwise enhance the performance/efficacy of the system. This adaptivity can be a real-time process based on here-and-now data, e.g., slowing system progress down for a user who is deemed to be temporarily overloaded, or it can be part of a long term strategic process of harvesting and mining user interaction data to enhance system efficacy.

The module requires students to work according to a scientific method, and to report results in scientific forms, such as papers and posters.

Objectives and learning goals
The module will develop the student's knowledge in the following areas:
- common data types and collection thereof
- machine learning methods and their applicability in the context of adaptive media systems
- fundamental scientific methodology and hypothesis-driven research

The module will develop the student's skills in the following areas:
- apply scientific computing skills (e.g., Python, R) for collection, preprocessing and curation of user and usage data
- analyze the applicability and affordance of machine learning techniques, or other means of enabling adaptivity, in the context of adaptive media systems
- apply scientific methodology and techniques, including state-of-the-art review, hypothesis generation, and critical reporting in paper/poster format

The module will develop the student's competencies in the following areas:
- synthesize and evaluate adaptive media systems based on techniques such as machine learning, user behavioral data, etc.
- apply scientific methodology towards research in adaptive media systems, and the documentation/communication thereof

Extent and expected work load
The module consists of 15 ECTS supervised, student-governed problem-oriented project work.

Pre-requisites for participation
The prerequisites for participation are listed in the module description (see link above).

Examination
The module is examined through a standard group-based project exam. See the module description (see link above) for any further detail on requirements, examination and assessment.

It is a prerequisite for being allowed to take part in the project examination that the project documentation is handed in on time (see exam rules).