

#### Semester description

#### General information about the semester

Semester: MED7, 1st semester, M.Sc. in Medialogy Department: <u>Architecture</u>, <u>Design and Media Technology</u>

Study Board: Media Technology

Period: 1 September 2022 — 31 January 2023

Study plan: https://studieordninger.aau.dk/2022/35/3503

# Semester theme description

Title: Adaptive Media Systems

This semester focuses on media-technological systems that adapt to their users to some degree. A large emphasis is given to the proper scientific methodology in terms of identifying what work has been done previously and in the development and properly designed scientific evaluations of these systems.

It explores how system creators can use machine learning to improve the design of such systems by using data as a resource to (re-)design systems, to gain a deeper understanding of interactions to design adaptable versions of the interaction (e.g. by understanding/classifying users), or to make novel interactions possible that are tailormade to users resulting in e.g. faster, more reliable, relaxing, or more fun interactions.

The theme is supported by one mandatory courses covering machine learning (MLMT) in the context of media technology. Two more elective course must be selected from a choice of three (MWC, NIS, RTCG).

### Semester organization

The semester is comprised of

- a 15 ECTS semester project on the theme of Adaptive Media,
- one mandatory 5 ECTS course, "Machine learning for media experiences" (MLME) supporting the core of the project. The MLME course provides the methodological background in statistical and machine learning technique to harness data for adaptations, e.g. for profiling users, enabling advanced interactions such as input, or analyzing interactions and experiences.
- two further 5 ECTS courses from the three following:
  - Mobile & Wearable Computing (MWC) introduces various concepts around designing systems for mobile or wearable devices limited input/output resources.
  - Narratives in Interactive Systems (NIS) provides the knowledge on how harness narratives in interactive experiences.
  - Real-time computer graphics (RTCG) teaches the creation of efficient visuals for interactions in 3D environments.

It should be stressed that AAU expects each student to spend 30 hours of study per ECTS credit, amounting to 900 hours per semester. This gives a load of about 45 hours per week.

# Semester coordinator and secretary

Hendrik Knoche (coordinator), Nicola Walker (secretary)