

Semester description

General information about the semester Semester: MED7, 1st semester, M.Sc. in Medialogy Department: <u>Architecture, Design and Media Technology</u> Study Board: <u>Media Technology</u> Period: 1 September 2022 — 31 January 2023 Study plan: https://studieordninger.aau.dk/2022/35/3518

Semester theme description

Title: Adaptive Media Systems

This semester focuses on the applications of machine learning and artificial intelligence in media technology and on the use of proper scientific methodology in the development of adaptive media-technological products. It explores the applicability of machine learning and data-driven approaches to interactive digital media, through the active construction of interactive media systems and the execution of properly designed scientific evaluations of these products.

The theme is supported by one mandatory course and two elective courses. Unlike previous semesters in the program, the deliverables for the semester project include a scientific paper and poster. Students also have the opportunity to present their project work in an internal conference, MedCon.

Semester organization

The semester is organized as a 15 ECTS semester project on the theme of Adaptive Media Systems, supported by one 5 ECTS mandatory course, "Machine Learning for Media Experiences" (MLME). Students must also choose two further 5 ECTS courses from the following three courses: "Real-Time Computer Graphics" (RTCG), "Mobile and Wearable Computing" (MWC), and "Narratives in Interactive Systems" (NIS).

MLME provides knowledge about statistical and machine-learning techniques that the student can apply in media-technological products in order to make them respond and adapt to users and contexts. RTCG is a practical course that provides knowledge about current real-time 3D rendering techniques and pipelines for real-time and responsive media applications, such as games, virtual reality, and virtual production for movies. MWR focuses on the building blocks of mobile and wearable services and systems, it enables students to develop applications that exploit the sensing capabilities and distributed nature of mobile and wearable computing. Finally, NIS explores the role of narratives in immersive media, students learn how to design, implement and evaluate interactive narrative applications.

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

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