

Courses in English Course Description

Department	MUC.DAI
Course title	Project AICA - Artificial Intelligence in Culture and Arts
Course number	
Hours per week (SWS)	three three-day workshop phases, 72 contact hours, 108h self-study
Number of ECTS credits	6
Course objective	<p>Artificial intelligence (AI) is finding its application in the cultural and creative industries. It is already changing creation, production, distribution and marketing of art and culture. There are an increasing number of prominent examples of how artificial intelligence paints pictures, composes pieces of music or writes poems, novels and plays. Not only the creation of art, but also other areas of the cultural value chains are being broken up and reordered by AI, such as the dissemination and communication of artistic content, as well as the acquisition and connecting existing and new recipients. Providers such as Spotify and Netflix are the best-known examples of how AI-powered recommender systems are creating new distribution and marketing of music and video content, and how this can increase how this is changing reception habits and audience preferences. Furthermore, AI harbors the potential to enhance the accessibility and participatory nature of both art creation and consumption. By reducing technical barriers - such as the replacement of expert systems with data-driven machine learning - AI can also democratize technical solutions, making them more accessible to non-experts.</p> <p>This course aims to bring together students from diverse disciplines, including STEM, creative studies, music, business, and more, to develop tangible AI solutions for the challenges and opportunities present in the cultural and creative industries. The primary objective is to inspire these diverse minds to construct practical AI solutions, addressing both the challenges and opportunities inherent in the cultural and creative industries. Through the course, students will gain crucial competencies, enabling them to comprehend and shape AI-driven processes across numerous artistic and creative fields. Simultaneously, they will reflect on and appreciate the evolving impact of AI within the cultural and creative sectors.</p> <p>Learning outcomes After successful participation in this course, students are able to:</p> <ul style="list-style-type: none"> • acquire knowledge independently, especially in the context of artificial intelligence's application within culture and arts. This includes the ability to put their understanding into practice, demonstrated through AI's integration into fields such as music, arts, and various cultural facets. • systematically plan, design, and execute projects in the intersection of AI, culture, and arts, employing agile methodologies like design thinking for innovative problem-solving. • collaborate effectively within an interdisciplinary team, construct tangible artifacts, and articulate their project outcomes to a public audience through compelling presentations.
Prerequisites	<p>This module is aimed at all students enrolled in a third year Bachelor program at HM Hochschule München University of Applied Sciences (HM) or the Hochschule für Musik und Theater München (HMTM). Students in Master programs are also welcome; it is thus designed as an interdisciplinary venue, which brings together a range of perspectives.</p> <p>Prior experience and basic knowledge about machine learning is required; its project-based character requires high levels of intrinsic motivation and the willingness to actively participate in a project. Students apply via a short application form with a query about their competencies and motivation.</p>
Recommended reading	<ul style="list-style-type: none"> • Anantrasrichai, N.; Bull, D., 2022. Artificial intelligence in the creative industries: a review. Artificial Intelligence Review • Caramiaux, B. et al, 2019. AI in the media and creative industries. New European Media (NEM). • Géron, A., 2019. Hands-On Machine Learning with Scikit-Learn, Keras, and TensorFlow: Concepts, Tools, and Techniques to Build Intelligent Systems • further literature will be provided at the beginning of the course

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Teaching methods	<p>The module incorporates the concepts of service-learning and project-based learning within an agile framework, utilizing various teaching and learning techniques:</p> <ul style="list-style-type: none">• Workshops and Teamwork: Students will form teams and, supported by technology and culture experts as well as agile coaches, will develop practical AI solutions to address challenges and opportunities within the cultural and creative industries.• Challenges: Project ideas may originate from the students themselves or be proposed by stakeholders and institutions within the cultural and creative sectors.• Presentational skills: These will be further honed through the necessity to present both ongoing and final results within the project scope, and at a final presentation.
Assessment methods	<p>At the end of the project workshop, the students have to present their projects in a final colloquium once per semester. This presentation will be attended by students from both universities along with representatives from the educational, research, cultural, and creative sectors.</p> <p>The colloquium will be open to all students of HMTM and HM who are also interested in projects at the interface between interface of AI and art and culture and want to present them.</p> <p>Furthermore the teams will compile a 10-page group paper that outlines the project's evolution and progress.</p> <p>The project, the presentation, and the resulting artifacts are graded.</p>
Language of instruction	English
Name of lecturer	Prof. Dr. Gudrun Socher (FK07), Dr. Benedikt Zönnchen (MUC.DAI), Team of coaches and experts
Email	zoennchen.benedikt@hm.edu
Link	
Course content	<p>Over the winter semester, an immersive project workshop will take place, featuring three separate three-day meetings. Here, roughly 25-30 students will form teams to collaborate with technology and culture experts. Throughout the winter semester, students will collaborate in mixed teams of 4-5 members, working on the conception and execution of their own projects. Supported by agile coaches, these teams will work on developing practical AI solutions to tackle challenges and opportunities within the cultural and creative industries. Coaches will guide these teams, providing individualized support during the meetings and the work process at various stages. This assistance throughout the project workshop will be grounded in agile innovation approaches, including design thinking and methods borrowed from the Google Design Sprint.</p> <p>The project workshop kicks off with the first meeting where topics are established, teams are formed, and initial ideas, along with their potential implementation strategies, are brainstormed. During the second meeting, the teams present their preliminary results. Experts then evaluate these results, focusing on their technical and conceptual aspects, providing crucial feedback for further refinement. The third meeting serves as the conclusion, where final projects are showcased. In the intervals between these meetings, teams independently continue their work on their AI projects. They have access to the technical and content experts, as well as the coaches, for support as needed.</p> <p>Upon completion of the course, students are inspired to extend the scope of their projects, whether through a thesis, product development, or a performance. Experts will persist in their support, fostering the continuation of these projects beyond the confines of the course.</p>
Remarks	