COURSE CONTENT

Course Code	DM2012 (DA5009)
Course Title	Explorations in A.I. Generated Art
Pre-requisites	NIL
No of AUs	3
Contact Hours	39 contact hours

Course Aims

This interdisciplinary elective course will introduce you to how artificial intelligence (AI) is used in the arts and how to use AI techniques to create your own art. In this course, you will learn about the unique artistic potential of AI and machine learning and how to apply them to the creative process for both inspiration and as a medium. This course is intended for artists, designers, as well as computer science and engineering students and anyone interested in how machine learning can be applied in the context of creative industries. There are no prerequisites, and the course is designed to be accessible to anyone.

Intended Learning Outcomes (ILO)

Upon the successful completion of this course, you will be able to:

1. Identify and describe the unique artistic potential of AI in arts and how it differs from other art practices
2. Demonstrate command of techniques required to create and AI generated artwork
3. Apply creative AI-generated art techniques and tools to create unique AI Art prototypes
4. Present, discuss and evaluate the use of AI in your work
5. Constructively discuss and critique artworks concepts, methods and approaches using A.I. employed by peers

Course Content

The course emphasizes both fundamental knowledge in artificial intelligence and machine learning as well as the application of creative ideas derived from art styles and art history in an interdisciplinary format. The course will introduce the fundamental design of machine learning and AI in terms accessible to the non-specialist while framing these technologies within larger historical and conceptual contexts. You will work in teams with students from different backgrounds, and together you will employ an innovative investigation process to understand a topic and respond with creative and appropriate solutions.

Seminars

In-class seminars and mini-lectures will outline the past and most recent artistic practices that use machine learning and AI. You will learn about how AI is infused into a broad range of practices, including new media installation, robotic art, visual art, electronic music and sound, and electronic literature. The class will also investigate the role of data in machine learning art, showing how artists use data as a raw material for novel forms of art expression.

Projects and workshops

In a creative environment, you will investigate AI tools for AI-generated artworks, practice on open-source Google Colab Notebooks, and with VQGAN+CLIP and other various machine training processes and apps code-free. You will be able to compare and explain how different types of machine learning systems enable different types of artistic practices through projects and workshops on topics that you choose or are assigned.