

HUMANITIES AND DIGITAL TECHNOLOGIES

A Digital Journey of the Humanities

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Summer Institute in the Arts & Humanities 2024
The University of Hong Kong

Date: July 22-26, 2024 (Mon-Fri)

Time: 2:30-5:30pm

Venue: CPD-3.41, Centennial Campus, HKU

Course Description

This course is designed to introduce students to various digital modeling, scanning, and analysing techniques. Participants will learn how to create 3D objects using different software, as well as how to use photogrammetry and LiDAR scanning to digitize real-world objects. In addition, students will be taught the basics of digital humanities research, including textual analysis methods like tokenization and semantic analysis, through practical exercises. They will also explore examples of digital humanities projects and receive guidance on designing their own initial project. The ultimate goal is to equip students with the necessary skills to digitize different media and analyse digitized information computationally.

Course Outline

Jul 22 (Mon) The Increasing Fascination and Values with 3D Model and Digital Objects - Making 3D Objects with 3D softwares

Computerization and digitization of many objects into game and movie making are familiar sight, yet these digital objects are becoming increasingly essential in our digital lives. With the technology of NFT and evolving metaverse and AI, creating digital objects become a sophisticated field, with rich possibilities. This session introduces software tools that allow creative sculpting of digital objects, and showcase how AI may aids in making complex design and object replications.

This session explores the growing significance of digital objects in our lives, fueled by advancements in NFTs, metaverse, and AI. It highlights software tools for creative digital sculpting and demonstrates how AI can assist in complex design and object replication.

Jul 23 (Tue) Scanning the world into 3D - Photogrammetry and LiDar, Memories and Digital Twin of the World

Popular platform like Google Earth 3D is not new, yet the technology behind is developing rapidly to prepare the world transformation into the digital twins for industries and the metaverse, photogrammetry and LiDar scans are used extensively to map our world into 3D, through these processes our memories and records of places are also transformed into the digital realm, simply exercises in this session to record and transfer into the digital realm your favourite memories!

In this session, explore the rapidly evolving technology behind platforms like Google Earth 3D, which uses photogrammetry and LiDAR scans to create digital twins of our world for industries and the metaverse. Learn simple exercises to transform your favourite memories and places into the digital realm.

Jul 24 (Wed) Introduction to Digital Humanities and Textual Analysis

Embark on a captivating journey as we delve into the foundations of digital humanities and the challenges faced in traditional textual studies. Students will gain insight into how computers interact with texts, mastering crucial preprocessing techniques such as tokenization, splitting, and stop word removal. Through immersive group activities, students will engage in a word counting exercise and visualization, fostering practical expertise in analysing textual data.

Jul 25 (Thu) Semantic Analysis and Real-World Examples

Combined with an awareness of the nuances of language, students will unlock the power of meaning in texts through an exploration of semantic analysis. Students will examine worked examples that demonstrate the application of models for extracting intricate semantic nuances. With a focus on practicality, students will engage in troubleshooting exercises, practice sessions, and real-life examples, refining their ability to interpret and analyse texts using computational methods.

Jul 26 (Fri) Getting ready for your first Digital Humanities Project

Elevate your understanding of digital humanities and expand your understanding of humanities by learning the steps for designing your first project. In this class, students will acquire a comprehensive understanding of the steps and roadmap involved in executing successful digital humanities projects, a perfect first step towards building a meaningful portfolio of humanities project.