NARRATE Istanbul Workshop

9-10-11 December 2024

Session Information

https://narrateproject.eu/workshop

All sessions will be held in English.

DAY ONE: Monday, 9 December 2024

Open to all experience levels, a personal computer is required.

Session I: Storytelling

Workshop Title: Storytelling with Digitized Cultural Heritage and Extended Reality

Instructors: Asım Evren Yantaç, Vahide Sena Çoban, Alp Efe Esassolak

Instructors' Affiliation and Brief Biography:

Evren Yantaç, is one of the first academics in Turkey to complete bachelor's, master's, and doctoral degrees in the field of interaction design. In 2012, he continued his post-doctoral research on mixed reality solutions in Sweden. Since 2013, he has been serving as a faculty member at Koç University, Department of Media and Visual Arts, and KUAR Creative Industries Research Center. He has focused his studies on interactive experience design, interface design, augmented reality, user experience, and creative thinking in design. Additionally, since 2019, he has been serving as co-director at Koç University's KARMA XR Lab. Evren Yantaç provides consultancy to nearly 10 doctoral students funded by various sources and participates in various projects such as ISTKA, TUSEB, TUBITAK, and Horizon projects. He collaborates with industry in the fields of art and design and conducts research activities. His work in interaction design and augmented reality makes significant contributions to the literature.

Vahide Sena Çoban graduated from Koç University's Psychology and Media and Visual Arts departments in 2023 and began her graduate studies at Koç University's KARMA XR Lab under the Design, Technology, and Society program. Currently, she continues her research on participatory and speculative methods in design and the use of XR technologies for cultural heritage preservation.

Alp Esassolak, after graduating from Istanbul Technical University's Architecture program in 2020, began working as an architect and a 3D artist in the industry while continuing his academic works at the Game Interaction Technologies program at ITU. Currently he is developing his master's thesis at Koç University's KARMA XR Lab under the Design, Technology, and Society program. His research focuses on developing innovative design and implementation approaches to creative storytelling methodologies within XR technologies.

Workshop Topic and Description: This workshop delves into using digitized cultural heritage for storytelling through technologies like 3D scanning, modeling, and augmented reality (AR) filters. Participants will explore how these tools can support education and heritage preservation. The workshop showcases how 3D models of heritage artifacts can become AR filters or holograms, which can be projected onto physical spaces or specific locations. Following an introductory seminar on the role of extended reality (XR) in cultural heritage digitization, participants will engage in hands-on activities to create mobile AR filters and develop storytelling ideas for the "Medeniyetlerin Hafıza

Kapısı" project. Group discussions will focus on the potential of AR and mixed reality for education, heritage preservation, and storytelling.

Workshop Outline:

Seminar: Introduction to XR concepts, cutting-edge technologies, and examples of digitizing tangible and intangible heritage.
Hands-on Activity: Creating mobile AR filter content for the "Medeniyetlerin Hafıza Kapısı" project.
Group Discussions: Exploring alternative uses, features, and strategies for mobile AR filters and mixed reality in the context of cultural heritage digitization.

Workshop Objective and Learning Outcome:

Objective: The main objective of this workshop is to provide participants with foundational knowledge on how 3D models, AR filters, and holograms can be utilized for cultural heritage digitization and storytelling.
CLOs: By the end of this workshop, participants will:
Understand key terminology and concepts related to XR for presenting digitized cultural heritage.
Gain insights into the technologies behind AR filters and holograms.
Experience in the process of creating effective mobile AR filters for cultural heritage presentations.

Session II: Design-Fiction

Workshop Title: Speculating the Creative Future of Urban Digital Twins for Cultural Heritage Experience, Education and Preservation

Instructors: Asım Evren Yantaç, Vahide Sena Çoban

Instructors' Affiliation and Brief Biography: Same as Session I

Workshop Topic and Description: This workshop focuses on the future of Urban Digital Twins and XR (VR, MR, AR) in cultural heritage experience, education, and preservation. Participants will explore how these technologies create immersive, interactive experiences that connect past and present, offering new ways to engage with heritage in urban environments. Using the "Design Fiction" method, they will imagine future scenarios through speculative design, crafting narratives about how Urban Digital Twins and XR could transform our interaction with and preservation of cultural heritage. This participatory approach encourages thinking beyond current technologies, envisioning new possibilities for enhancing learning, storytelling, and community engagement. Through hands-on activities and discussions, participants will reflect on the social, educational, and cultural impacts of these technologies and generate ideas for their future use in the cultural heritage field.

Workshop Outline:

Introduction to Digital Twinning for Cultural Heritage and Urban Digital Twins
Overview of the Design Fiction (DF) methodology
Introduction to DF probes and thematic questions
Scenario development for different cases
Discussion of workshop outcomes

Workshop Objective and Learning Outcome:

Objective: This course aims to introduce participants to the future of Urban Digital Twins and extended reality (XR) applications, focusing on their potential for enhancing cultural heritage experiences, education, and preservation.

CLOs: By the end of this workshop, participants will:
Learn about the creative applications of Digital Twinning in the domain of cultural heritage for various purposes.
Learn about and experience DF methodology in design
Gain insights into the future of DT and XR applications in cultural heritage.

Session III: Time-Travel VR

Workshop Title: Time Travel VR Tour Presentation and Demonstration

Instructors: Esra Akdere, Ayşegül Karaman

Instructors' Affiliation and Brief Biography:

Esra Akdere: Co-Founder & President of Time Travel VR Tour. Esra has over 20 years of experience in digital marketing and has worked on numerous international campaigns. She has extensive expertise in creating and designing digital solutions.

Ayşegül Karaman: Co-Founder & Creative Director at Apollo Digital & Architecture. Ayşegül has been involved in architectural design since 2005 and specializes in project management and the integration of digital solutions. Both instructors have significant experience with VR/AR/XR technologies, having worked on projects at the KARMA Mixed Reality Lab at Koç University since 2015.

Workshop Topic and Description: This workshop will cover the innovative use of virtual reality (VR) technology in tourism, specifically focusing on the Time Travel VR Tour project. Participants will experience a live demonstration of the VR tour, exploring historical sites in Istanbul from a new immersive perspective. The workshop will also discuss the technical and design aspects behind creating such a VR experience.

Workshop Outline:
Introduction to Time Travel VR Tour
Overview of VR Technology in Tourism
Live VR Tour Demonstration
Q&A Session
Interactive Session: Participants' Hands-on VR Experience
Future Developments and Innovations in VR Tourism

Workshop Objective and Learning Outcome:
Understand the application of VR technology in tourism.
Experience an immersive VR tour.
Learn about the technical components required to develop a VR tour.
Gain insights into the future of VR in tourism.

DAY TWO: Tuesday, 10 December 2024

Intermediate Level, a personal computer is required.

Session IV: Topographic and Photogrammetric Techniques for Ecclesiastical Heritage Documentation

Instructors: Efstratios Stylianidis, Aikaterini Stamou, Zoi-Eirini Tsifodimou

Instructors' Affiliation and Brief Biography:

Prof. Efstratios Stylianidis
Member of the Board of Directors
ex. Vice-Rector for Research and Lifelong Learning
Laboratory of Geoinformatics, Director
Faculty of Engineering, School of Spatial Planning and Development
Aristotle University of Thessaloniki, Greece

Dr Aikaterini Stamou
Adjunct Lecturer, post-Doc Researcher
Laboratory of Geoinformatics, Member
Faculty of Engineering, School of Spatial Planning and Development
Aristotle University of Thessaloniki, Greece

Zoi-Eirini Tsifodimou
Researcher
Laboratory of Geoinformatics, Member
Faculty of Engineering, School of Spatial Planning and Development
Aristotle University of Thessaloniki, Greece

Workshop Outline:

Lecture 1: Topographic Surveying for Heritage Documentation (1 Hour)

- Fundamentals of Topography:
Definition and meaning of topographic surveys.
Applications in heritage documentation (for churches, monuments, sites).
Common topographic tools and techniques (theodolite, total station, GNSS, etc.).
- Topographic Survey Process:
Data collection: Establishment of control points and benchmarks.
Surveying techniques (traditional vs. modern methods).
Accuracy considerations and challenges in ecclesiastical buildings (due to complex shapes and angles).
- Topography in Action: Case Study:
Example of a topographic survey of a church or heritage site, discussing challenges and solutions.

Outcome: Participants will understand the role of topography in cultural heritage documentation and its importance for accurate 3D modeling and reconstruction.

Lecture 2: Photogrammetric Techniques for 3D Documentation (1 Hour)

- Introduction to Photogrammetry:

Definition and types of photogrammetry (close-range and aerial).

Importance of photogrammetry in documenting detailed structures (e.g., church facades, sculptures, stained glass).

Tools: DSLR cameras, drones, photogrammetric software (Agisoft Metashape).

- Photogrammetric Workflow:

Planning a photogrammetric survey (camera positions, lighting considerations).

Image acquisition: Tips for obtaining high-quality images of ecclesiastical structures.

Data processing: Converting 2D images to 3D models.

- Photogrammetry in Action: Case Study:

Example of a photogrammetric project on a church or monument, discussing the photogrammetric pipeline from image acquisition to 3D reconstruction.

Outcome: Participants will gain an understanding of photogrammetry as an essential tool in the detailed documentation of cultural heritage and how it complements topographic methods.

Hands-on Example: 3D Reconstruction Using Agisoft Metashape (3 Hours)

Step-by-Step Walkthrough:

Set up the project: Import the images into Agisoft Metashape.

Aligning photos: Demonstrate aligning photos to create a sparse point cloud.

Build the dense point cloud: Constructing a dense point cloud from aligned photos.

Create the mesh: Converting the dense point cloud into a 3D mesh.

Texture mapping: Applying textures for a realistic 3D model.

Hands-On Activity:

Participants will use a pre-captured dataset of an ecclesiastical object or building (e.g., an ecclesiastical book, a Byzantine building) to create their own 3D model.

Instructors will provide guidance and best practices.

Outcome: Participants will create a 3D model using Agisoft Metashape and understand the practical workflow of transforming photographic data into a digital 3D object.

Q&A / Discussion (10 min)

Open discussion to address questions related to topography, photogrammetry, or software use.

Participants can share insights or challenges experienced during the hands-on session.

Open to all experience levels, a personal computer is required.

Session V: Soundscape

Workshop Title: Narrate Project-Ecclesiastical Heritage / Soundscape Workshop

Instructor: Oğuz Öner

Instructor Affiliation and Brief Biography:

Oğuz is a cultural manager, urban researcher, and 'sound weaver'. He graduated from Manchester Metropolitan University and Aalto University School of Arts, Design and Architecture in Helsinki in 2006, and has since been involved in projects that connect arts and culture with urban design, psycho-geography, and sound. He currently serves as the Artistic Director of Koç University, and is the artistic programmer and manager of the Koç University Cultural Center (SGKM). He holds a PhD degree from Istanbul Technical University, where he researched the relationship between sonic environment, culture, and people in the field of 'soundscape perception'. Oğuz has been organizing 'soundwalks', collecting and analyzing user data to create the in-flux sound map of urban settings, including central Kadıköy as part of his ongoing project, kadıköy_Akustik. This project was recently included in a socio-scientific TUBİTAK 4004 project focusing on children'scityperception. Over the past 15 years, Oğuz has also curated, hosted, and organized a variety of events, including concerts in auditoriums, open-air spaces, and online; music series in libraries; dance and theatre productions; discussions; art festival movie screenings; urban projects; exhibitions; and interactive experiences. He also collaborates with consulates, cultural institutions, and artistic initiatives to organize a range of his signature events such as the Perşembe Klasiği/Thursday Classic lunchtime classical music concert series, SalıCaz! Terrace Jazz Sessions, Thematic Open Air Cinema Days, Deep Listening Experiences, and many others. Oğuz founded the theatrical/indietronica/avant-garde music band, Nu Park, which has performed on various local and international stages and festivals in the last ten years. Recently, he has been very interested in sound and music production for films, dance performances, new media, and interactive installations. Oğuz produces and performs the music of Istanbul-based contemporary dance company, TORK Dance, and also works for Akbank Sanat Dance Projects with live, improvised, meditative, and playful quests. He has worked with Apple and New York-based Tech + Art artists Tin & Ed to create sound design for the AR exhibition 'Speaking Vessel', and partnered in the IOS app under the same name. Oğuz is currently working on a scientific project that intersects the fields of neuroscience, XR, sound perception, and the arts.

Workshop Topic and Description:
Participants are invited to join sound designer and researcher Dr. Oğuz Öner in an immersive sound experience, where they will tune into the sacred soundscape accompanying Balat's (preferably) religious/ecclesiastical visual landscape, and "weave" their own rhythms and sounds in response to this environment. Following a presentation on sound perception, the identity of space, and "acoustic ecology," participants will engage in sound meditation, a sound walk through Balat's sacred spaces (both indoor and outdoor), and sound mapping exercises.

Participants will carefully listen to the sounds and sonic traces of their surroundings, assigning names to these auditory layers based on their emotions. After mapping the symbolic sounds of their environment, they will move on to an interactive activity called "Conducted Sound Improvisation." In this activity, participants will improvise rhythmic patterns and expressive-reflective sounds, orchestrated in response to the layers of sound they captured from the sacred soundscapes earlier.

This experience, aimed at playfully questioning the photographic perception of space identity on an auditory memory plane, will be interactive, offering participants creative expression opportunities through sound. A recording of the participant orchestra will be made at the end of the workshop and shared with the project team. The project team may later share the sound recordings and sound map outputs produced with the participants for exhibition/publication purposes.

Workshop Objective and Learning Outcome:

Workshop Objectives:
- To explore the intersection of sound, space, and memory within ecclesiastical environments / The workshop aims to deepen participants' understanding of how sound contributes to the identity of religious spaces and enhances the documentation process of ecclesiastical heritage.
- To develop practical skills in sound mapping and acoustic analysis / Participants will engage in hands-on activities that involve listening, recording, and mapping the unique soundscapes of religious sites, linking these auditory experiences to the visual and spatial characteristics of the environment.
- To foster creative expression and collaboration through guided improvisation / The workshop will encourage participants to creatively engage with the captured sounds, culminating in a collaborative improvisation session that reflects the auditory identity of the space.

Expected Learning Outcomes:
- Enhanced Awareness of Acoustic Ecology in Ecclesiastical Spaces / Participants will gain a nuanced understanding of how sound interacts with the architectural and spiritual elements of religious sites, contributing to their overall cultural and historical significance.
- Practical Experience in Sound Documentation Techniques / By the end of the workshop, participants will have developed skills in focal and active listening, sound mapping, and analysis, which they can apply in the preservation and documentation of ecclesiastical heritage.
- Creative Interpretation of Soundscapes / Participants will be able to interpret and creatively express the auditory characteristics of ecclesiastical spaces, contributing to the broader documentation and preservation efforts within the NARRATE project.

Session VI: Spatial Historiography & Mapping

Workshop Title: Spatial Historiography & Mapping

Instructor: Firuzan Melike Sümertaş

Instructor Affiliation and Brief Biography:

Firuzan Melike Sümertaş's research is on the urban/architectural/visual culture of the late Ottoman Empire and its capital city Istanbul, with a particular interest in the Greek-Orthodox community. She currently focuses on digital humanities methods. Sümertaş holds a PhD. in History from Boğaziçi University, Istanbul and B.Arch and M.A degrees from Middle East Technical University in Ankara, Department of Architecture, and Program in Architectural History. Besides IstanΠόλις (www.istanpolis.org) an international collaborative lead by Christine Philliou from UC Berkeley, she collaborates with Namık Erkal, Haris Theodorelis-Rigas and ANAMED at Koç University, Istanbul under the project entitled "Phanariot Materialities".

Workshop Topic and Description: Spatial Historiography is a beginners-level workshop for the humanities researchers, historian, social scientists, people who have interest on mapping particularly historical data and creating new historical knowledge through maps.
It requires no prior advanced technical knowledge, or experience in mapping software.

A basic understanding of computers and web based tools such as Google, Safari will be sufficient. The workshop aims to introduces researchers with spatial concepts, tools and analysis methods. By the end of this workshop they will be able to outline a data set from a historical source, and visualize and spatialize it with easiliy accessible tools.

Workshop Outline:
PART 1 - Theoretical background / examples: 1,5 hour
0 - 10 Min - Ice breaker activity
30 - 40 min - Spatial Historiography / Spatial Turn / Historical GIS
Discussion through examples
45 min – Introduction to GIS/Mapping basics

PART 2 - Practical applications: 1,5 hour
Find your data / map
Coordinate your data
Match it with historical layer

Workshop Objective and Learning Outcome:
Understanding the importance of data visualization and (geo)spatialization for historical research
How visuals and maps shape our understanding of history
How visuals and maps open new questions for historical research
Introducing different techniques of visualization and spatialization of historical data
Clarity/simplicity/legibility of visuals and mapping
Infographics
How mapping transforms our understanding of a certain concept in history
New narratives with images and spatial patterns - case studies (existing and new examples)

Hands-on experience of visualization and spatialization of historical data
Georeferencing of historical maps
Where to find historical maps
Collaborative projects (state / non-state)
GIS as a database
Critical analysis and interpretation of spatialized, and/or visual historical data

Organized by:

NARRATE Project Consortium
https://narrateproject.eu/partners