

This event is organised by the Graduate School of Culture Studies and Arts, supported by the ASTRA project of the Estonian Academy of Arts - EKA LOOVKÄRG (European Union, European Regional Development Fund).

# WORKSHOP SMART INFORMATION SYSTEMS FOR CULTURAL HERITAGE

# October 15-19, 2018

# Estonian Academy of Arts and Graduate School of Culture Studies and Arts (GSCSA)

### Date and time: October: 15-19, at 9.00 - 15.45

**Venue:** Estonian Academy of Arts, Põhja pst 7, Tallinn, room D306 (15.-17.10), D412 (18.-19.10)

#### Theme

The theme of the workshop focuses on the informative systems and applications developed for documentation, management and enhancement of Cultural Heritage, including an overview on advanced methods and technologies for 3D surveying and modelling of architecture and works of art.

The lectures include an overview on tools for heritage cataloguing and dissemination through information systems, with some of the latest implementation by the scientific community. The participants will learn the basics in 3D surveying with photogrammetry, data acquisition with digital cameras, models processing and practice for the construction of a Cultural Heritage 3D digital model. Some practical exercises will be arranged to complement theoretical lectures.

Lectures will be delivered by Ph.D. Arch. Fabrizio I. Apollonio, Full Professor at the Department of Architecture University of Bologna, and Ph.D. Arch. Silvia Bertacchi, Adjunct Professor at University of Bologna.

#### Registration

The final registration deadline is **October 11** (max 20 participants). **Registration form.** 

#### Students participating will have to bring along:

Material:

- Digital camera (Reflex)
- PC/Laptop (high performances)

Software:

• Agisoft PhotoScan Professional Edition (30-day trial at <u>www.agisoft.ru</u>)

**Contact:** 

CULTHERIS2018@gmail.com



# **DETAILED PROGRAMME**

Date	Morning session				Afternoon workshop
	9.00-10.30		10.45-12.15		14.15-15.45
October 15, 2018, Monday	Introduction to the workshop. Documentation, management and enhancement of Cultural Heritage: general issues and opportunities for public bodies and professionals.	Coffee break	Smart information systems: latest experiences in 3D- centred information systems for data gathering and storage.	Lunch	Italian projects for digital documentation of Cultural Heritage: developments in recent years.
October 16, 2018, Tuesday	Platform and services for Cultural Heritage: SACHER project (Smart Architecture for Cultural Heritage in Emilia Romagna).	Coffee break	Specific case study for the documentation of complex restoration interventions: the Information system for the restoration of the Neptune's Fountain in Bologna.	Lunch	End users' access and practice on the two information systems for the management of 3D architectural models.
<b>October 17</b> , 2018, Wednesday	An overview on advanced methods for documenting Cultural Heritage: reality- based surveying and 3D modelling.	Coffee break	Photogrammetric processing of digital images to generate 3D spatial data: software features and results.	Lunch	Possible 2D and 3D outputs and visualization of the 3D model.
<b>October 18</b> , 2018, Thursday	Practical exercise on data acquisition with a digital camera: best practices and suggested workflow.	Coffee break	Practical exercise on modelling a small object with the software Agisoft PhotoScan.	Lunch	In depth-analysis of colour issue: image balancing and processing systems.
October 19, 2018, Friday	Final practical exercise: image acquisition of an architectural detail.	Coffee break	Final practical exercise: image processing and creation of the 3D model of an architectural detail.	Lunch	Presentation of practical exercises results. Conclusion of the workshop.