



GINA STAVROPOULOU, ESR5

PROJECT: "Geometrically Enriched Computer Vision Algorithms For 3D/4D Reconstructions"

Supervisor: Prof. Luc Van Gool
Catholic University of Leuven (KUL)

The central goal of the research is to explore how computer vision methods of 2D/3D shape retrieval, reconstruction and completion can be enriched and implemented to assist cultural heritage applications. At the moment the work is focused on feature

extraction algorithms and more specifically on their implementation on 2D data collected from the byzantine church of Asinou in Cyprus, one of the project's case studies. Additionally, 3D feature extraction algorithms are being explored with implementation on 3D data of small archeological objects collected with the Minidome of the Visicos group in KUL.



EDUCATIONAL BACKGROUND

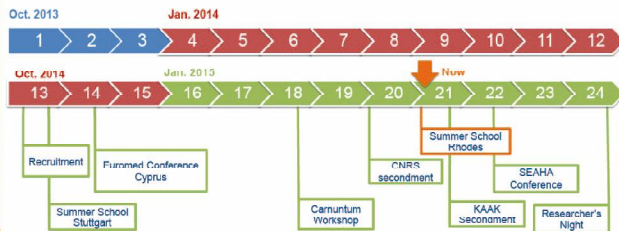


Dipl. Eng. In Rural and Surveying Engineering



MSC in GIS & Archaeology

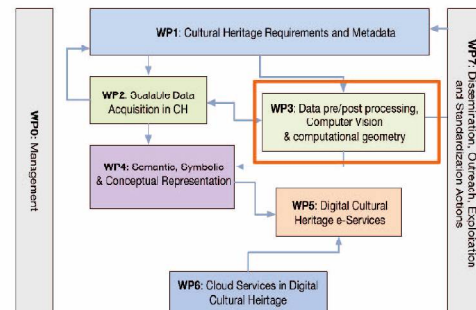
ITN-DCH TIMELINE



WORKING PACKAGES

KUL is responsible for WP3

Deliverables: 3.1, 3.2, 3.4



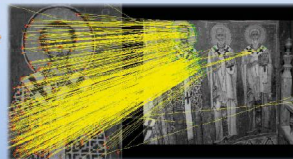
RESEARCH

Case Study: Byzantine Church of Asinou



Data: Images of the frescos of the Asinou church's interior. Mainly religious figures with similar characteristics (halos, hand gestures, clothing)

Explore different feature sets for the fast detection of inter-fresco correspondences and, eventually, detect similar images/figures.



Fill out missing parts, due to cracks and other deteriorations, using content-aware, texture synthesis or inpainting techniques, taking into account information from similar images.

SECONDMENTS:

2015:

- CNRS, Marseille (May 4th-May 29th)
- KAAK, Bonn (June 16th-July 3rd)

2016 :

- Fraunhofer, Darmstadt
- ArcTron, Althenhann (Dates to be determined)

FUTURE EVENTS:

SEAHA 2015
 Researcher's night



Home Country



Host Country



Host Organization

