

## GINA STAVROPOULOU, ESR5

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

**Supervisor: Prof. Luc Van Gool**  
**KU Leuven**

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 Visics group in KUL.



## EDUCATIONAL BACKGROUND



Dipl. Eng. In Rural and  
 Surveying Engineering

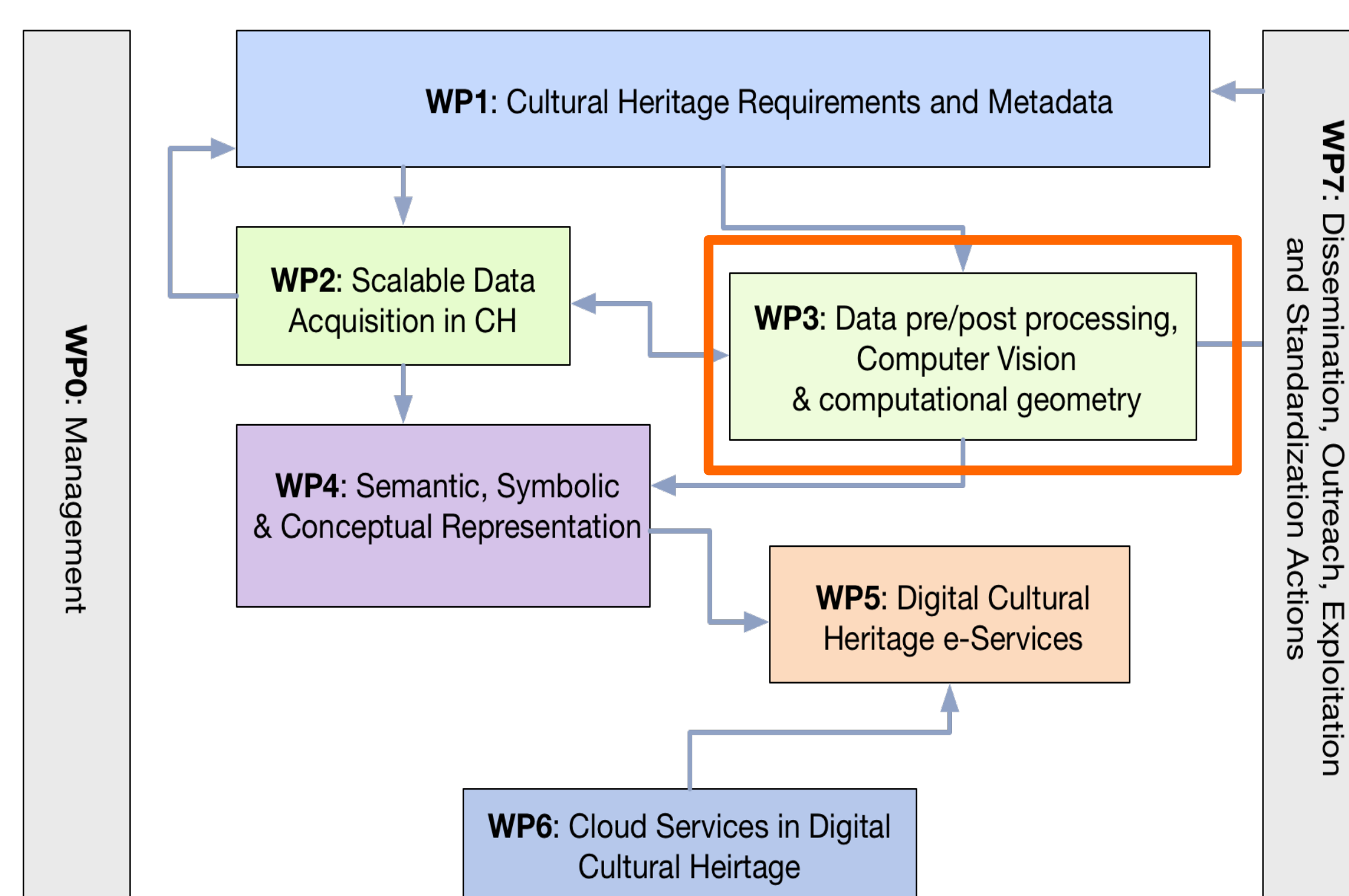


MSc in GIS &  
 Archaeology

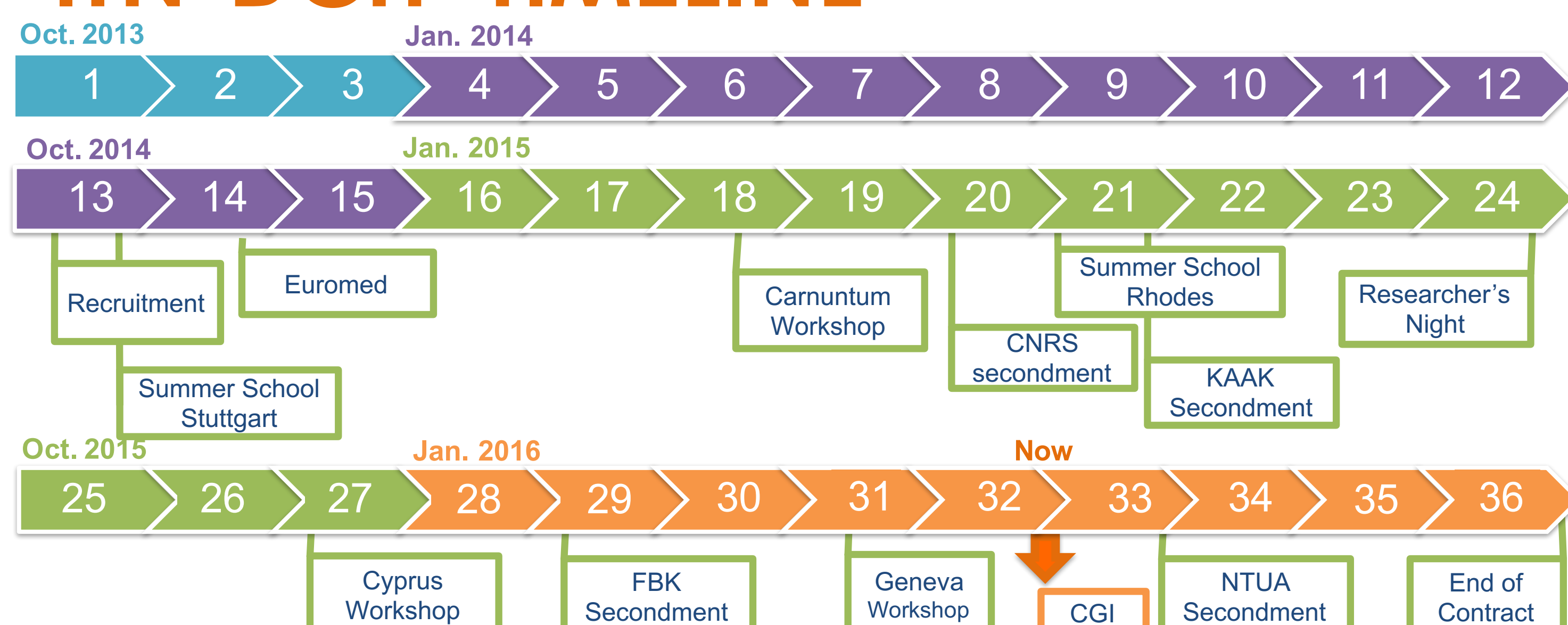
## WORKING PACKAGES

**KUL is responsible for WP3**

Deliverables: 3.1, 3.2, 3.4



## ITN-DCH TIMELINE



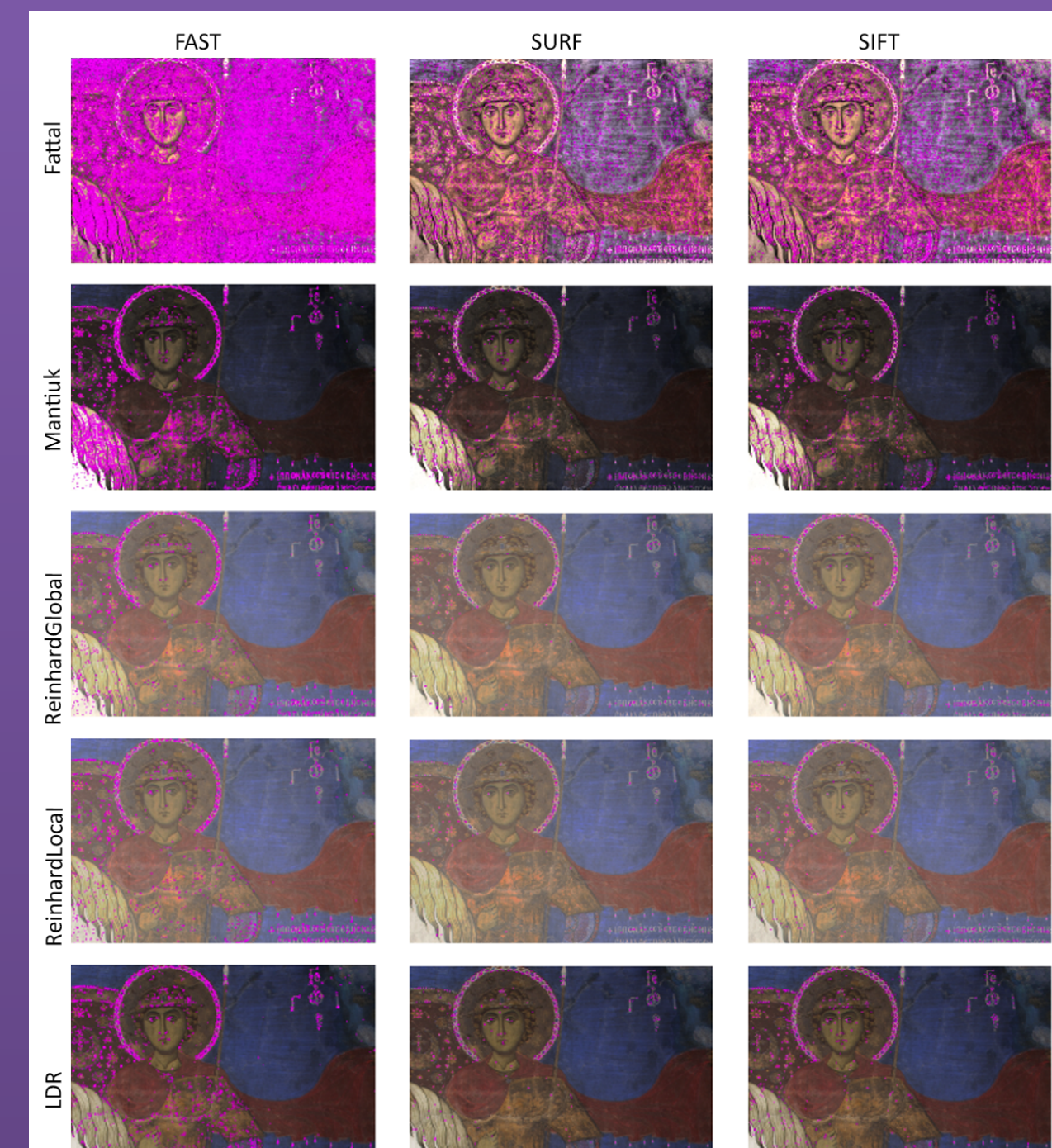
## RESEARCH

**Comparison of Point Feature Detectors and Descriptors in the context of cultural heritage**



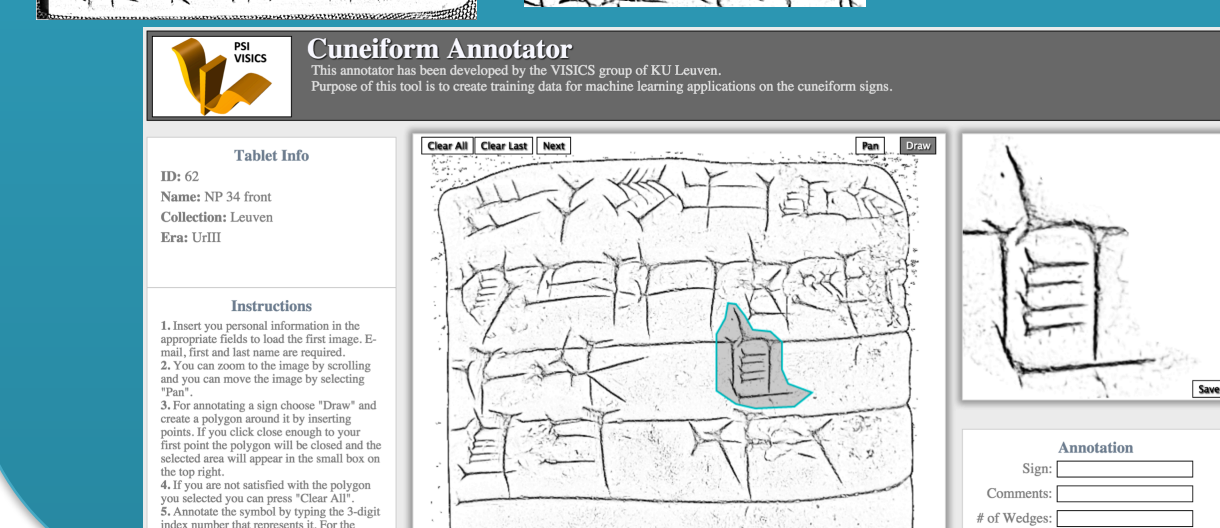
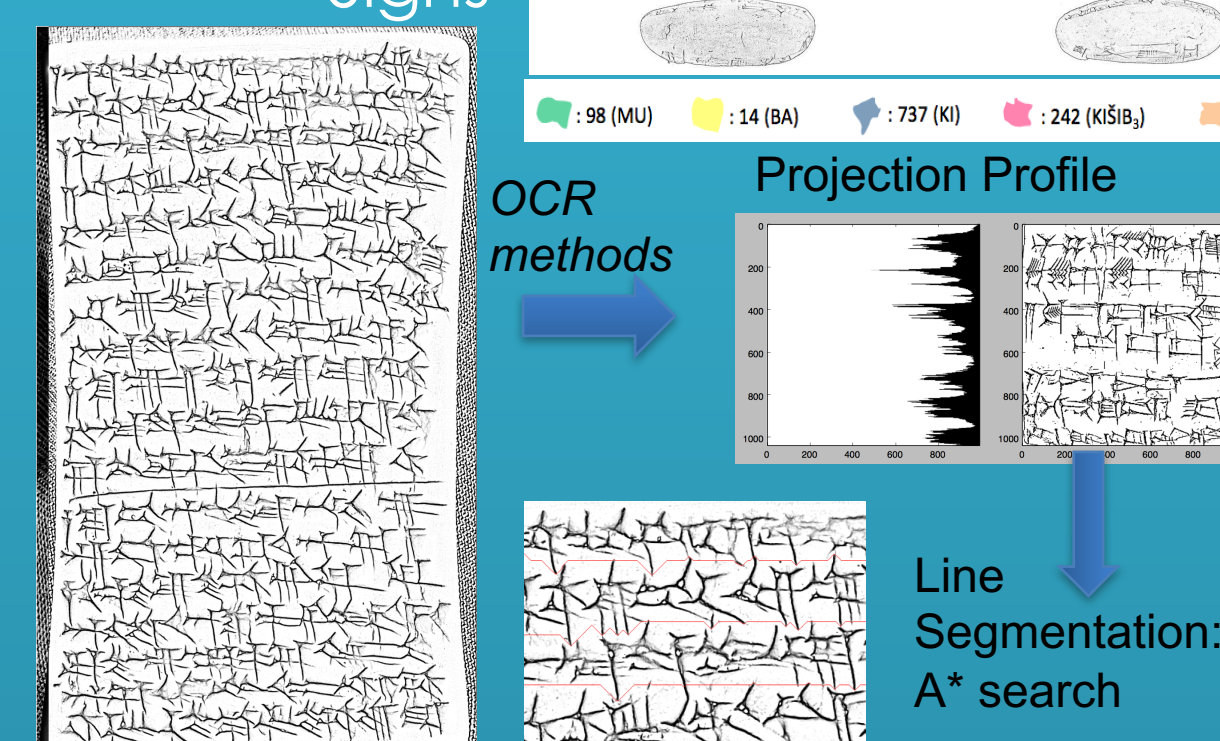
Stavropoulou E., Stavropoulou G., Georgopoulos A., Van Gool L., Ioannides M., 2015, Comparison of Point Feature Detectors and Descriptors in the context of cultural heritage, SEAH, Jul. 14-15, 2015, London, UK.

**Evaluation of HDR Tone Mapping Operators for Photogrammetric Applications**



Suma R., Stavropoulou G., Stavropoulou E.K., van Gool L., Georgopoulos A. and Chalmers A., 2016, Preliminary Evaluation of HDR Tone Mapping Operators for Cultural Heritage, Arqueológica 2.0 [To be published]

**Content Based Cuneiform Tablet Retrieval Segmentation & Annotation of Cuneiform Signs**



## SECONDMENTS:

**2015:**

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

**2016 :**

- FBK, Trento (February 11<sup>th</sup>-26<sup>th</sup>)
- NTUA, Athens (July 4<sup>th</sup> – August 4<sup>th</sup>)

## FUTURE EVENTS:

- Arqueológica 2.0, Valencia
- Researcher's Night 2016



Home Country



Host Country



Host Organization

