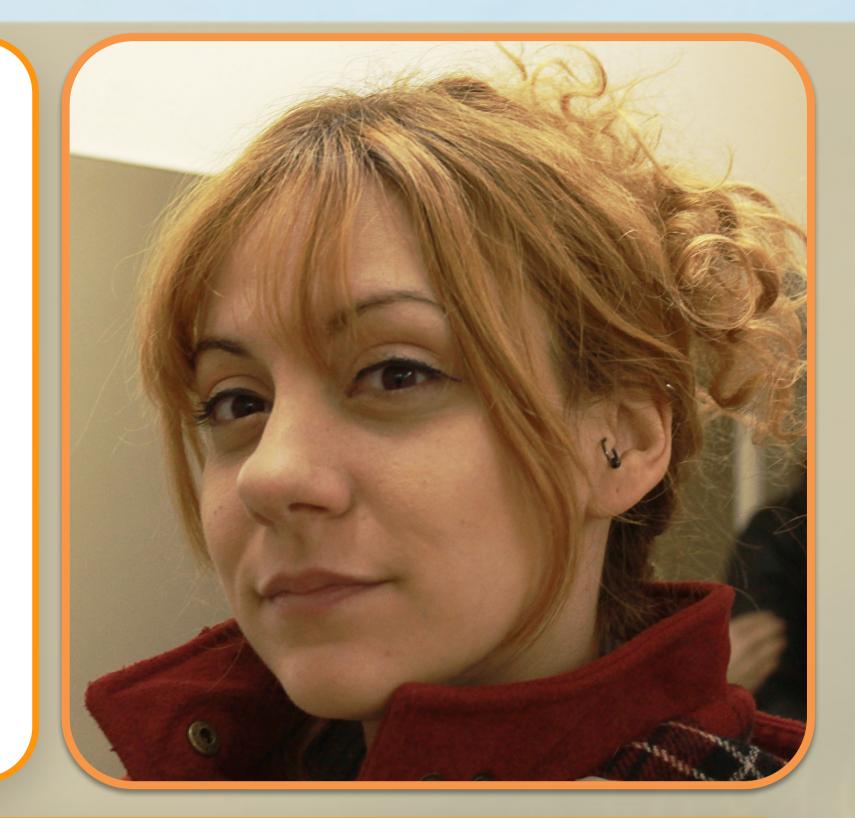
TN-DCH www.itn-dch.eu Initial Training Network for Digital Cultural Heritage

GINA STAVROPOULOU, ESR5

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

Supervisor: Prof. Luc Van Gool

extraction algorithms and more specifically on their



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

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



Oct. 2014

Dipl. Eng. In Rural and Surveying Engineering





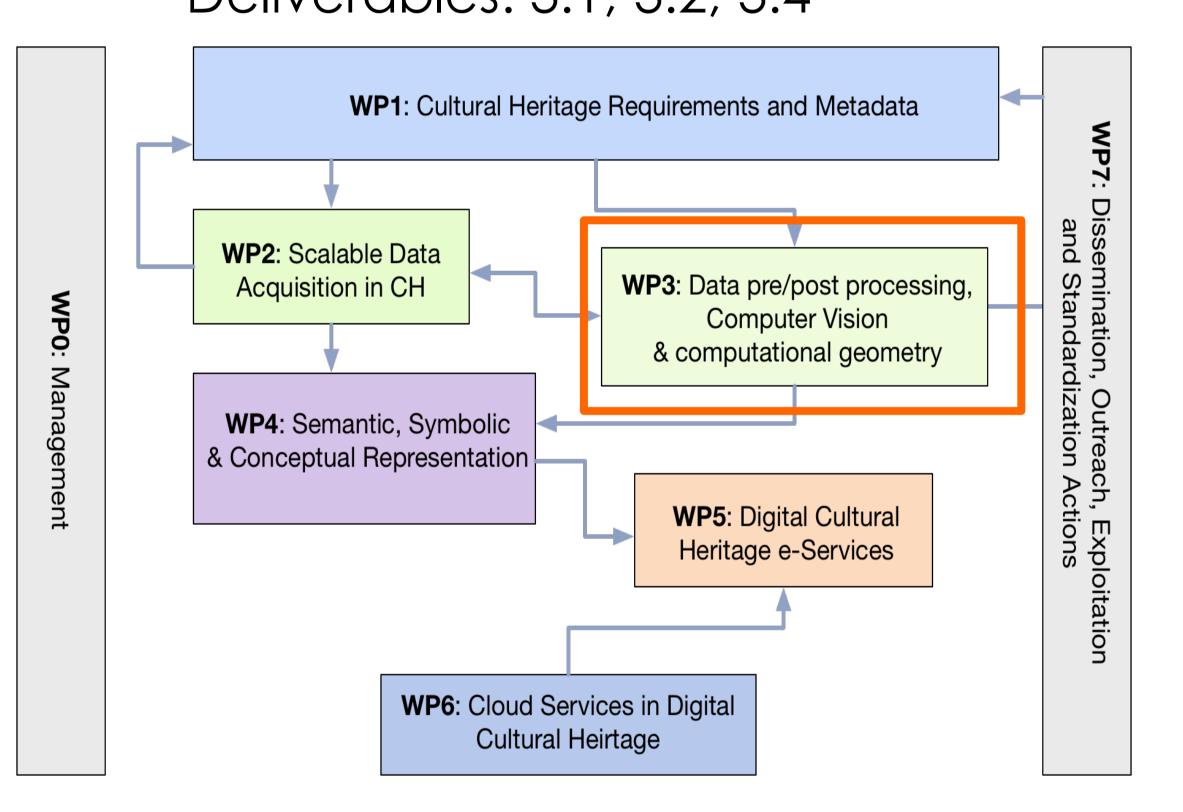
23

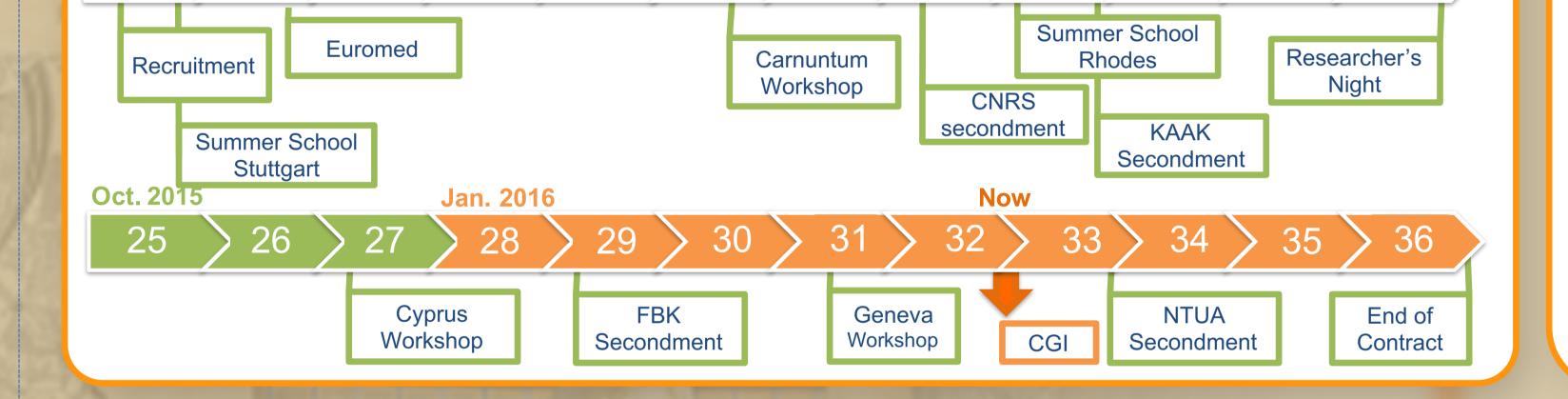
ITN-DCH TIMELINE Oct. 2013 Jan. 2014 5

Jan. 2015

WORKING PACKAGES KUL is responsible for WP3

Deliverables: 3.1, 3.2, 3.4





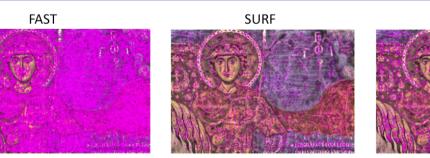
RESEARCH

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





Evaluation of HDR Tone Mapping Operators for Photogrammetric Applications









Content Based	NP 4 NP 10
Cuneiform	
Tablet	
Retrieval	
Segmentation	NP 2 NP 3
& Annotation of Cuneiform	
Signs	All compared and the second and the
	🗨 : 98 (MU) : 14 (BA) 🌾 : 737 (KI) 낱 : 242 (KIŠIB ₃) 📕 : 828 (UR)
The second secon	<section-header><section-header><section-header><figure><figure></figure></figure></section-header></section-header></section-header>
This annotator has been developed by	ator the VISICS group of KU Leuven. g data for machine learning applications on the cuneiform signs.
Tablet Info ID: 62 Name: NP 34 front Collection: Leuven Era: UrII Instructions 1. Insert you personal information in the appopriate fields to load the first image. Email, first and last name are required. 2. You can zoon to the image by selecting "Pan". 3. For annotating a sign choose "Draw" and create a polygon around it by inserting prints. If you cold chose "Draw" and create are will more in the small box on the top right. 4. If you are not satisfied with the polygon you selected you can press "Clear All". 5. Annotate the symbol by typing the 3-digit index number that represents it. For the annotation please use the index numbers	

SECONDMENTS: 2015:

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

2016 :

FBK, Trento (February 11th-26th)

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



Suma R., Stavropoulou G., Stathopoulou 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]

- NTUA, Athens
 - (July 4th August 4th)

FUTURE EVENTS:

- Arqueológica 2.0, Valencia
- Researcher's Night 2016





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