ITN-DCH

www.itn-dch.eu

Initial Training Network for Digital Cultural Heritage

CHANCE MICHAEL COUGHENOUR, ESR1

AUTOMATED 3D/4D DATA COLLECTION AND PROCESSING USING TERRESTIRAL LIDAR AND PHOTOGRAPHY
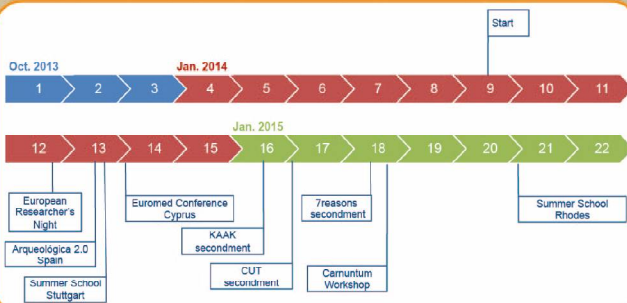
(Work Package 2, 3, 5, 6 & 7)

USTUTT's contribution to the project is directly associated with both the improvement ot remote sensing technology for applications in DCH as well as its integration into the design of Work Package 6: Cloud Services in DCH.

ACADEMIC BACKGROUND

- MA Archaeology and Heritage, University of Leicester
- Specialized Masters course in Virtual Archaeology, SEAV
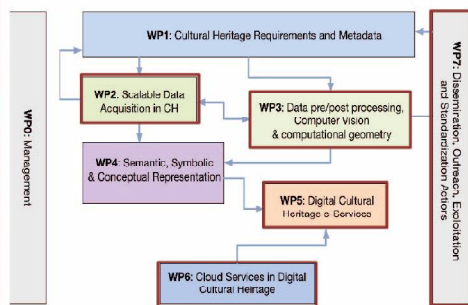- BA History, Minor Computer Science

TASKS

- Automatic in-situ calibration
- Point cloud generation using dense image matching on the fly with Graphical Processing Units
- Point cloud merging of terrestrial laser scanning and photogrammetry
- Meshing and coarsening the original data to deliver compact 3D representations
- Image pre-processing for spatial matching and temporal ordering for 3D/4D reconstruction

FUTURE PARTICIPATION

Secondments	Conferences	Museum Exhibits	Pending Publications
2	5	2	4

Project Work Package Involvement

Deliverable Tasks

Work Package 6: Cloud Services in DCH

Task 6.1 – Quality of Service guarantees in interactive, real-time cultural heritage services

Task 6.2 – Cloud services in data acquisition

Future Deliverables – D3.1, D5.1, D5.2, WP7

TRAINING*

Conference Presentations & Public Events

9

Secondments

3

Publications

1

*Since start of fellowship

MARIE CURIE ACTIONS