

Email: rahaf.orabi@hcch.uni-heidelberg.de

Marstallstr. 6, Room 317 | 69117 Heidelberg

Rahaf Orabi |PhD.

Selected Computer Skills

RealityCapture	●●●●
Agisoft Metashape	●●●●
Cyclone Register+/3DR	●●●
CloudCompare/Meshlab	●●●
Meshroom	●●●●
Autodesk Recap	●●●●
Artec Studio	●●●●
3DS Max	●●●
Blender	●●●
Geomagic Warp	●●●
Rhino /Grasshopper	●●●
Autodesk Revit	●●●
AutoCAD/ Architecture	●●●●
SketchUp	●●●●
Photoshop/ Lightroom	●●●●
Illustrator/ InDesign	●●●
After Effect	●●●
QGIS	●●
Unity	●
Python	●
R	

Equipment Expertise

- FARO Focus 330x
- Leica P40
- Leica RTC360
- Leica BLK360
- Surphaser 100 HSK
- Artec 3d Space Spider
- Aicon SmartScan3D-HE C5
- MALÅ Ground Explorer (GX)
- Certified Drone Pilot (EU A1/A3) Germany
- DJI Phantom 4
- DJI Matrice 4e

Work

Mar 2026- Present **Junior Professor for Digital Cultural Heritage Studies: Heidelberg Center for Cultural Heritage, Heidelberg University, Germany**

Projects:

Jun 2026- Jun 2027 **HADAD-AI: H**eritage **A**egis, for the **D**ocumentation of Cultural **A**ssets' **D**estruction in Syria using **A**rtificial Intelligence**,** Gerda Henkel Foundation

From Aleppo to Giza: Spatial and Archival Memory in the Digital Documentation of Living Landscapes, Heidelberg| Harvard Explorer Seed Fund (Project Declined by the Co-PI)

Teaching: Cultural Heritage and the Protection of Cultural Property Master Program

Summer 2026 Digital Heritage: Tools and Applications
Summer 2026 World Heritage Management and Education: World Heritage in Danger Between Risks and Resilience
Winter 2026 Digitization and Visualization of Cultural Heritage Assets
Winter 2026 Digital Collection Management

May 2022-Feb 2026 **Research Technical Scientist: The Cyprus Institute (CYI), APAC LAB, Nicosia, Cyprus**

-Performing 3D Digital Documentation and analysis
-Supporting research projects
-Supervising interns and students from Erasmus programs
-Participating in public outreach events (sCYence Fair 2022, 2023, 2024)

Key European projects include:

-3D4CH (Link), ECCCH Echoes (Link), Atrium (Link), 4CH (Link), Aridane+ (Link), iperionhs (Link)

Key 3D documentation and virtual reconstruction projects:

-The Cypriot Built Heritage: The Department of Town Planning and Housing, Cyprus
-The 3D documentation and virtual restoration of the modified Skulls from Khirokitia
-The 3D documentation and visualization of the Agios Ioannis Lampadistis Monastery, Cyprus
-The Shatby Necropolis of Alexandria, Egypt (link)
-The Virtual refitting of the Palikastro Kouros, Crete, Greece (link)
-The 3D documentation of archaeological finds from Hala Sultan Tekke excavations
-3D documentation and analysis of archaeological finds from Pyla Kokkinokremos excavations
-Unlocking the Mysteries of Ancient Andean Wooden Boards (Link)
-The Mill Heritage of Cyprus (Link, Link)
-3D documentation and analyses of the Ariño (Teruel, Spain) dinosaur fossils dated to the Early Cretaceous (Link)

The 3D digital documentation of the following sites in Cyprus: Marki Alonia, Kourion, Apollon Hylates, Tomb nr.4 in Tombs of the kings and two additional tombs in Paphos.

Oct 2023-Feb 2025 **Lecturer: The Cyprus Institute Graduate School**

In the master's program Digital Cultural Heritage, in the course titled "Documentation & Scientific Visualization and Cultural Heritage Research"

Mar-Dec 2024 **Architect (CYI/UNDP)**

The 3D documentation of the Martinengo Bastion and the Ravelin Gate, Cyprus
The 3D documentation and the virtual reconstruction of the Campanopetra Basilica (Link)

2018-2022 **Architect: Pázmány Péter Catholic University, Hungary- Syria**

Sep- Oct 2021 The Syrio-Hungarian mission in Marqab Citadel, Tartous Syria: Geophysical survey in Tartus Cathedral, and digital documentation of skeletons

Aug-Sep 2021 Digital documentation of human skeletons and carved stones in Igriș Romania

Oct-Nov 2019 The Syrio-Hungarian mission in Marqab Citadel, Tartous Syria: 3D documentation of the castle with a focus on the arrow slits

Sep-Oct 2019 PPCU and The Holy Spirit University in Lebanon: 3D Surveying of churches in northern Lebanon (Deir Mar Bila, Hardeen, Maad)

Apr-May 2018 The Syrio-Hungarian mission in Marqab Citadel, Tartous Syria: 3D documentation important pottery objects

2013-2018 **Architect: Directorate General of Antiquities and Museums, Syria**

Selected Publications

Edited Books

1. Thiel, F., & Orabi, R. (Eds.). Reviving Aleppo: Urban, Legal and Digital Approaches for Post-War Recovery. In book series: *Cities, Heritage and Transformation*, Springer. (2024). https://link.springer.com/book/9783031658570

Peer Reviewed Journal Articles

2. Hermon, S.; Moreau, R.; Lucchetti, L.; Orabi, R.; Soyluoğlu, M.; & Vassallo, V.; Levy, N.; Kakkoura, K.; Bakirtzis, N. Preparing the ground for the European Collaborative Cloud for Cultural Heritage (ECCCH) with heritage digital twins - multi-disciplinary data integration and visualisation for research and conservation: The case-study of a Nativity Icon from Deryneia, Cyprus
3. Soyluoğlu, M.; Orabi, R.; Hermon, S.; Bakirtzis, N. Digitizing Challenging Heritage Sites with the Use of iPhone LiDAR and Photogrammetry: The Case-Study of Sourp Magar Monastery in Cyprus. Geomatics 2025, 5, 44. https://doi.org/10.3390/geomatics5030044
4. Fischer, P. M., Feldbacher, R., Bürge, T., Darwin, J., Dybkjær, A., Georgiou, R., Hermon, S., Kofel, D., Lorentz, K. O., Miyauchi, Y., Moreau, R., Orabi, R., & Vassallo, V. (2025). The New Swedish Cyprus Expedition: The 2023 and 2024 excavations at the Late Bronze Age cemetery of Hala Sultan Tekke. Opuscula. Annual of the Swedish Institutes at Athens and Rome, 18. https://doi.org/10.30549/opathrom-18-02
5. Orabi, R; (2024). Decoding Urban Evolution: A Parametric Reconstruction of The Old City of Aleppo Between the Mamluk and the Post-War City, Digital Applications in Archaeology and Cultural Heritage (34), https://doi.org/10.1016/j.daach.2024.e00355.
6. Hermon, S., Orabi, R., Vassallo, V., Polig, M., MacGillivray, J. A., & Driessen, J. The Death and the (Digital) Re-Birth of a God – 3d Virtual Refitting of the Palaikastro Kouros. (2024). Journal of Cultural Heritage (68),pp.99-106. https://doi.org/10.2139/ssrn.4749353.
7. Orabi, R; (2024). Aleppo Pixelated: An Urban Reading Through Digitized Historical Maps and High-Resolution Orthomosaics. Case Study of al- ʿAqaba and Jallūm Quarters, Digital (4),(1),pp.152-168. https://doi.org/10.3390/digital4010007.
8. Orabi, R; Bakirtzis, N; Artopoulos, G. (2023). A Digital Approach to Revisiting the Byzantine Past of al- Madrassa al- Halawiyya in Aleppo. Journal on Computing and Cultural Heritage (16), 4, https://doi.org/10.1145/3625300
9. Orabi, R. (2023). Adapted in place: A digital geometric analysis of the muqarnas dome of al-Bimaristan al-Nuri in Damascus. Digital Applications in Archaeology and Cultural Heritage (29), https://doi.org/10.1016/j.daach.2023.e00270.
10. Orabi, R. (2020). Masons' Marks in Aleppo A Study of a Defensive Tower in Old Aleppo: Using 3D Laser Scanning and Photogrammetry for Identification and Classification. Digital Applications in Archaeology and Cultural Heritage (19). https://doi.org/10.1016/j.daach.2020.e00154
11. Orabi, R; Mouhanna, Z. (2016). Parametric Origami as a Method of Designing and Spatial Modeling, Case Study (Fast Deployable Housing). Damascus University Journal for Engineering Sciences. (In Arabic).

Book Chapters

12. Jayadevaiah, Y; Orabi, R. (2023). Between Surviving and Sustaining: Archaeological Site of Ererouyk and the village of Anipemza, Armenia, FORTHCOMING INTERSPECIES, University of Pavia Press. https://www.paviauniversitypress.it/catalogo/digital-trategies-for-endangered-cultural-heritage/6696).

Conference Proceedings

13. Faka, M., Orabi, R., Tsagka, A., Papageorgiou, A., Vassallo, V., Hermon, S., & Bakirtzis, N. (2025). Hypothetical Reconstruction for the Conservation, Preservation and Valorisation of Cultural Heritage: The Kampanopetra Basilica in Salamis, Cyprus. Eurographics. https://doi.org/10.2312/dh.20253309
14. Koutoupas, A.; Orabi, R., (2025), Digital Documentation and Visualization of the Shatby Necropolis in Alexandria, Bulletin de la Société Archéologique d'Alexandrie, Volume 50, pages 69–78.
15. Orabi, R. (2021). Challenges of Applying Reality Capturing Methods in Post-Conflict Urban Context: The Digital Survey in the Old City of Aleppo. In CHNT – ICOMOS Editorial board (Ed.), Proceedings of the 26th International Conference on Cultural Heritage and New Technology. Vienna: Heidelberg: Propylaeum.
16. Orabi, R. (2020). Architectural analysis of the First Mosque in Aleppo using Terrestrial Laser Scanning (al- Shuaibiyya Mosque). Digital Presentation and Preservation of Cultural and Scientific Heritage. Burgas.

	-Digital documentation of war damage in the Old City of Aleppo -Digital Documentation of 7 monuments in the Old City of Damascus for Project ANQA -3D Documentation of the damages in the old city of Palmyra and 3D documentation of destroyed artefacts and their fragments. Documentation of illicit excavation in Syria -Digital documentation in **"**Yabrud" and architectural surveying in "Tell Nahr- al-Arab**"** -Architectural surveying in "Ras al-Shamra" and "Ras Ibn Hani**"**, 3D documentation of master pieces from the National Museum of Damascus **Preparing the Exhibitions**: **"**New Visions and Proposals for The Resilience of The Syrian Heritage**"** and **"**The Battle of Syria to Defend Its History**"**
2013-2017	**Teaching Assistant: Faculty of Architecture Damascus University, Syria** Teaching "Architectural Design Studio 1 and 4"

Education

2017-2023	**PhD** in History and Archaeology. Pázmány Péter Catholic University, Budapest, Hungary. Thesis title (Digital Reconstruction of The Urban Morphology of The Old City of Aleppo from the Medieval to the Post-War City: the case of Jallum and al-ʻAqaba Districts. A parametric study). Grade: Summa cum Laude
2020-2021	**MSc** in Digital Cultural Heritage. The Cyprus Institute, Nicosia, Cyprus. Thesis title (Revisiting the Architectural History of The Great Cathedral of Aleppo (al- Madrassa al- Halawiyya), An HBIM Approach). Grade: Excellent
2014-2015	**S**yria Course of the Science of Invention and Development, Damascus University, Syria
2013-2016	**MArch** in Architectural Design, Damascus University, Syria. Thesis title (The Role of Computation in The Architectural Design Process). Grade: Very Good
2007-2012	**BArch** in Architectural Engineering, Damascus University, Syria. Grade: Very Good

Training Courses and Internships

16-18 Jun 2026	ARTEMIS Summer School 2026 (Link)
10-19 Dec 2025	The Cyprus Institute, Nicosia, Python Basics
02 Oct-02 Nov 2025	The Cyprus Institute, Nicosia, Cyprus:3D Modeling for real-time applications and VR Visualization.
12-May-05 Jun 2025	The Cyprus Institute, Nicosia, Cyprus: Introduction to Programming for Digital Humanities & Cultural Heritage
04-11 Nov 2024	The Cyprus Institute, Nicosia, Cyprus: Teaching in Higher Education: Pedagogical Principles and Hands-on Applications
02-25 Oct 2024	ICCROM, Rome, Italy, International Training Course on Post-Crisis Recovery of Cultural Heritage (PCR-2024) (Link)
11-27 Jun 2024	The Cyprus Institute, Nicosia, Cyprus: Applied statistics using R
5-16 Dec 2023	The Cyprus Institute, Nicosia, Cyprus: Publishing in Academia: How to be a successful author and reviewer
Feb-May 2022	HERITAGE BEYOND WALLS 2° edition. Talks+ Challenge+ Award (Link)
06-11 Sep 2021	UNIPV, TUM, EPFL, CYI, UPV, PK/CUT, EUV: Digital Strategies for Endangered Cultural Heritage: Forthcoming INTERSPECIES (Link)
05-09 Jul 2021	IT Department of the German Archaeological Institute, Berlin: Introduction to Structure from Motion Photography (SFM)
17-21 May 2021	IT Department of the German Archaeological Institute, Berlin: Recording Cultural Heritage for Post-Conflict Recovery using GIS.
13-14 Dec 2018	Increasing Appetite for Creative Digital Technologies Among Young Cultural Heritage Defenders, Tunis, Tunisia
03 Sep-31 Oct 2018	The Cyprus Institute, Nicosia, Cyprus: Art Characterization lab, STARC, Cities- Digital Heritage.
01-15 Dec 2017	Faculty of History and Archaeology, Pázmány Péter Catholic University, Kocsola, Hungary: Geophysical Survey and 3Ds documentation in a Roman archaeological site next to Kocsola
16-26 Jan 2017	UNESCO, CyArk, IPCH, ICCROM, Beirut, Lebanon: Training Course on Aerial, Terrestrial Photogrammetry & Laser Scanning as part of the Project "ANQA" (Link).
23-25 Oct 2016	Arab Regional Centre for World Heritage, ICOMOS, GHF, Manamah, Bahrain. Workshop for Amal in Heritage Software (Link)
Mar and Sep 2011	DAAD exchange program: Nurtingen University, Department of Urban Planning

Volunteering

2024-Present	The Syrian Technocrats NGO/ Manager of the Culture Team (Link)
2021-2023	The Global Outreach Team in OurWorldHeritage (Link)
2017-2023	Translator at Coursera, Global Translator Community
2020-2021	Observatoire Patrimoine d'Orient, France (Link)
2010-2012	The International Association for the Exchange of Students for Technical Experience, Damascus

Conference's Participation and Organization

08-13 Sep 2025	Digital Heritage – International Congress 2025, Siena (Italy)
07-11 Nov 2022	The ninth issue of the International Euro-Mediterranean Conference EuroMed, Cyprus University of Technology, Limassol, Cyprus

Languages

Arabic– Native
English– C2
German– A2
Greek– A2

Scientific Memberships

Member of ICOMOS, 2018
Member of CIPA Heritage Documentation, 2017

Academic and Professional Profiles

Scopus
ORCID
ResearchGate
LinkedIn

26-27 Sep 2022	From Late Antiquity to the Ottoman period in the Levant, the Institute of Archaeological Sciences at Pázmány Péter Catholic University, Hungary
May-Nov 2021	Co-organizing the digital conference titled "The Recovery of Aleppo: Law, Architecture and Geodata Management to Revive War-Torn Cities". In collaboration with Prof. Dr. habil. Fabian Thiel from Frankfurt University of Applied Sciences. Frankfurt, Germany
2-4 Nov 2021	Conference on Cultural Heritage New Technologies (CHNT), Vienna, Austria
24-26 Sep 2020	Digital Presentation and Preservation of Cultural and Scientific Heritage—DiPP2020, Burgas, Bulgaria
02-06 Dec 2019	Arab World Heritage Young Professionals Forum, Tunis, Tunisia
25 Jun-4 Jul 2017	Memory: Lost and Recovered: Heritage World Heritage Young Professionals Forum 2017 Warsaw, Krakow, Poland

Keynotes and Guest Lectures

06-May 2025	Revival of Aleppo as a Post-War City–Digital Documentation and Social Land Policy/ German Arab Friendship Association (DAFG), Berlin, Germany
18- Oct 2024	From chronicles to Virtuality: A 3D urban journey in the Old City of Aleppo: in the 2nd event International Lectures Cycle "Visualizing and Defending Values in Architectural Heritage Changes"/University of Pavia, Italy
21-Dec 2023	The Digital Reconstruction of Cultural Heritage in Syrian Cities/ during the "Co-creating Strategies for Adaptation to Climate Change in Libya" (DAAD)/Justus-Liebig University Giessen, Germany
15 Mar 2023	3D modeling of Endangered Heritage/ Basel University, Basel, Switzerland
26 Sep 2022	The Urban Development of Aleppo/ BME University, Budapest, Hungary
06-07 Dec 2021	Establishing Dialogue Platforms for Post-War Recovery: The Example of Aleppo, Syria, by Fabian Thiel and Rahaf Orabi, in the 6th GIZ LandHub