

# Vittorio Lauro

## **EXPERIENCE**

# University of Turin, Department of Computer Science - PHD Student

September 2022 - PRESENT

• Phd Tech4Culture H2020-MSCA-COFOUND, PhD with scholarship in Technologies for Cultural Heritage

# **University of Turin, Department of Computer Science** — Research fellow

January 2022 - September 2022

• Implementation of the tasks within the BeArchaeo Project relating to the cataloging of the findings found, the creation of interactive models of the archaeological excavation and in-depth research in the technical and methodological field

# IAAD. - Institute of Applied Art and Design — Assistant teacher

April 2023 - Present

• Teaching activity for the study course in Digital Communication Design for the subject "Semantic web"

# Ca 'Foscari University, Venice — Professional in the role of teacher

June 2021 - November 2021

 Teaching and training activities on issues related to the pilot path of the COCO4CCI project, relating to the topic of virtual reality and the software industry

#### Be Archaeo Project Rise Horizon, Okayama (Japan) — Task Leader

- Task Leader of the surveys.
- Coordinator of all the team for the 3D material produced.
- Responsible for the production of the material for the final exhibition.

# Cesari Studium, Imola (Italy) - Architectural Designer

March 2021 - July 2021

 Detector with photogrammetric methodology, 3D modeler and CAD design of exteriors for the creation of architectural elevations aimed at maintenance interventions.

## Project Edo, Tokyo (Japan) - Scientific Director

June 2018 - April 2021

• "Edo Project" for the analysis and virtual reconstruction of the phases of the Edo Castle in partnership with Hibiya Library & Museum (Tokyo)

# International Research Institute for Archaeology and Ethnology, Naples (Italy) - Deputy Director

December 2017 - April 2021

- Administration and coordination of the institute.
- Evaluation and approval of new projects.
- Fund search and promotion of the institute

# International Research Institute for Archaeology and Ethnology, Naples (Italy) — Teacher for 3D survey

April 2017 - December 2017

• Responsible for the courses of the 3D survey and photogrammetry laboratory

#### Freelance, Italy - Photogrammetry operator and 3D modeler

June 2014 - March 2017

- 3D survey and mapping of the underground system for Naples Underground, Naples (Italy).
- 3D survey and mapping of the Montaguto landslide for Tecno-In, Naples (Italy).
- 3D survey and mapping of hydrogeological emergencies for A + Studio, Casalnuovo (Italy).
- 3D survey of elements of the Tokugawua ship for I.R.I.A.E., Hatsushima (Japan)
- Three-dimensional reconstruction of Tomb 21 of the necropolis of Falaji as-Souq for Batinah ExpressWay Rescue Team, (Oman)
- 3D survey of the structures of the Palatine Hill for Sapienza University, Rome (Italy).

# University of Rome, La Sapienza, Rome (Italy) — Project Manager

February 2014 - June 2014

• Responsible for the Archeo & Arte3D Laboratory for the selection and implementation of projects.

## **Different Companies, Italy** – Archaeologist and Detector

- Archaeological Consultancy for Sinergo Group for works for the arrangement of sewage structures, Naples (Italy).
- Archaeological Consultancy for Capys Archeology for electricity grid works, Naples (Italy)
- Archaeological Consultancy for the LTD School for the construction of a school building, Collepepe (Italy).
- Archaeological Consultancy for Corbo LTD for parking creation, Portici (Italy).
- Archaeological consultancy and photogrammetric survey of ancient Roman villa flooring for the University of Aberta, Ossaia (Italy).

# National Research Center, Institute for Applied Technologies for Cultural Heritage, Different Places — Internship as a 3D Surveyor for Cultural Heritage

November 2007 - August 2013

- 6 archaeological excavation and survey campaign at the Pyrgos Mavroraki site (Cyprus) from 2007 to 2013.
- Laser scanner detection and 3D modeling, at the archaeological site of Showbak (Jordan).
- 3D survey and modeling of the Maschio Angioino, Naples (Italy).
- Three-dimensional reconstruction of the archaeological site of Chan Chan (Peru).

# **Project Marturanum, Barbarano Romano (Italy)** — Project coordinator

August 2012 - May 2014

- Organization for mapping and surveying the 300 tombs present in the necropolis.
- Creation of the hiking trail.
- Coordination of the team for the enhancement of the archaeological park.

# Channel 21, Naples (Italy) — Internship as a cameraman and editor October 2002 - March 2003

• Cinema, director and video editor Internship at Canale 21, Naples.

#### **EDUCATION**

# La Sapienza University, Rome (Italy) — Archaeological Sciences

September 2008 - July 2011, 108/110

Specialized Degree in the Study of Archaeological Sciences, Faculty of Humanities.

# L'Orientale University, Naples (Italy) — Archeology

September 2005 - November 2008, 110/110 cum laudae

Degree in Archeology, Faculty of Archaeology.

# Language skills

Italian : Mother tongue

English : Mastery

## Software

#### **Video Editor**

- Pinnacle Studio 8-12
- Arcsoft Video
- Open Shot Video Editor
- VideoPad VideoEditor

## Office Automation and Developing

- Microsoft Word
- Open Office
- LiberOffice
- Google Doc
- Matlab
- Protegè

#### Operating System

- Ubuntu 8 → 16
- Windows Vista → 10
- Mac OS X  $10.5 \rightarrow 12$

#### **Image Management**

- Autocad
- FreeCad
- LibreCad
- Surfer
- Inkscape

## Radiocarbon analysis calibration software

• Oxcal

## 2D image editor

- Photoshop
- Picasa
- GIMP
- Pixlr Editor

#### Cloud point and mesh processing software

- JRC Reconstructor
- Meshlab
- Insight3D
- FaroScene
- Cyclon

- Zscan
- Autodesk ReCap
- Regard 3D
- Agisoft PhotoScan
- Zephyr 3D

#### **3D Modelling**

- Revit
- 3D Studio Max
- Blender
- SketchUp Make
- Unity 3D
- View 3D Scene
- 123D Design
- Vectary
- Rhinoceros
- Maya
- Paint 3D

#### **GIS Software**

- ArcGis
- Google Earth
- NASA World Wind
- RMaps

.

#### LINK TO PERSONAL WEBSITE

# Partial list of publications

- $V.\ Lauro,\ A$  hypothesis for the Pyrgos Virtual Museum from relief to virtual museum, in Seminary "Archaeometry and Charm: gender, copper and music of silk, University of Nicosia, 11-12 december 2013
- V. Lauro, F. Ceci Poster "La casa della divinitá, ricostruzione virtuale 3D del Tempio di Afrodite a Paleapaphos sulla base della monetizzazione provinciale romana" in Santuari Mediterranea tra oriente e occidente, interazioni e contatti culturali, Convegno internazionale, Museo di Villa Giulia, 2014
- V. Lauro, La Torre di Re Desiderio, in la Loggetta XX 2, 23-26, 2015

\_\_\_\_\_

#### Poster

1) V. Lauro, V. Lombardo, "Interdisciplinary approach to the dynamics of data collection, cataloging and homologation of photogrammetric models, in

AIAr2022 Congresso Tematico\_Padova, La sostenibiliá nei Beni Culturali, 29 June-1 July, 2022

#### Conference Paper

2) V. Lauro, V. Lombardo "CAVE, Archeology and virtual reality: visiting unreachable places" in AIAr2022 Congresso Tematico\_Padova, La sostenibiliá nei Beni Culturali, 29 June-1 July, 2022

#### Papers

3) V. Lauro, V. Lombardo "Prototype of virtual reality and CAVE installation for transdisciplinary archeology" in 5th International Conference on Interaction Design and Digital Creation / Computing, IIAI AAI 2022, July 2-7, 2022, Kanazawa, Japan

Honorable Mention; 10.1109/IIAIAAI55812.2022.00116

- 4) Lauro, V.; Lombardo, V. The Cataloging and Conservation of Digital Survey in Archaeology: A Photogrammetry Protocol in the Context of Digital Data Curation. Heritage 2023, 6, 3113-3136. https://doi.org/10.3390/heritage6030166
- 5) R.A.O. Project Recovery: Methods and Approaches for the Recovery of a Photographic Archive for the Creation of a Photogrammetric Survey of a Site Unreachable over Time doi: 10.3390/heritage6060250
- 6) Vittorio Murtas, Vittorio Lauro, and Vincenzo Lombardo. 2023. Virtual Archaeology in a Multi-platform and Multi-lingual Setting. In Adjunct Proceedings of the 31st ACM Conference on User Modeling, Adaptation and Personalization (UMAP '23 Adjunct). Association for Computing Machinery, New York, NY, USA, 422-426. https://doi.org/10.1145/3563359.3596664

#### Poster

7) Romeo M., Galigani M., Italia B., Fossataro C., Longo P., Bruno V., Clocchiatti A., Murtas V., Lauro V., Ricciardi E., Abbate-Daga G., Garbarini F. I am what I see in the mirror: bodily-self recognition is modulated by the perceived body image. XXXI National Conference - SIPF, 9-11 November 2023, Siena (Italy)

#### Paper

- 8) Lauro Vittorio, Lombardo Vincenzo, A Digital Data Curation-Based Photogrammetric Acquisition Methodology for Cultural Heritage, expanded with CIDOC CRM Compatibility: protocol BeA-PG, GCH 2023 Eurographics Workshop on Graphics and Cultural Heritage, 2023, https://doi.org/10.2312/gch.20231169
- 9) Lombardo, V., Lauro, V., Murtas, V., Goud, S. (2023). Merging Archaeological Site Recreation and Museum Exhibition. In: Holloway-Attaway, L., Murray, J.T. (eds) Interactive Storytelling. ICIDS 2023. Lecture Notes in Computer Science, vol 14384. Springer, Cham. https://doi.org/10.1007/978-3-031-47658-7 6

-----

#### Conference Paper

10) How many degrees of Emotional Separation are there between Real and Virtual Nature? A pilot study, Conference: ANNUAL REVIEW OF CYBERTHERAPY AND TELEMEDICINEAt: Paris, France, Eleonora Diletta, Alice Chirico, Valentina Mancuso, Marta Pizzolante, Vittorio Murtas, Vittorio Lauro, Sabrina Bartolotta, Andrea Gaggioli

#### Conference paper

11) Lombardo, V., Lauro, V., Murtas, V., Goud, S. (2023). Merging Archaeological Site Recreation and Museum Exhibition. In: Holloway-Attaway, L., Murray, J.T. (eds) Interactive Storytelling. ICIDS 2023. Lecture Notes in Computer Science, vol 14384. Springer, Cham. https://doi.org/10.1007/978-3-031-47658-7\_6

#### Paper

12) Lombardo, V., Lauro, V., Murtas, V. and Ryan, J., 2024. Chronology and Geospace Design in Virtual Reality for Archaeological Data Exhibition. International Journal of Service and Knowledge Management, 8(1). Available at: https://doi.org/10.52731/ijskm.v8.i1.810