Lorenzo Cardarelli - Curriculum Vitae
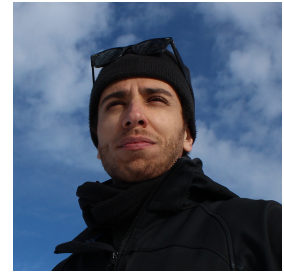18th July 2023

Born: 24th July 1995
Contact: lorenzo.cardarelli@uniba.it

Education

04/2022 – present   **Associate researcher**   📍 *Rome, Italy*
CNR-ISPC
Staff Prehistory and Protohistory Research Group; Staff MAD-Lab | Modelling Archaeological Data

11/2020 – present   **PhD**   📍 *Bari, Italy*
Aldo Moro University
PhD course in *Patrimoni archeologici, storici, architettonici e paesaggistici mediterranei*
Project title: *Variability and standardisation of vessel shapes in the 2nd and first half of the 1st millennium in continental Italy A Data Science and Machine Learning project for the quantitative study of archaeological ceramic profiles*
Tutor: Dr Marco Bettelli, Cotutores: Prof Andrea Cardarelli, Dr Paola Moscati

01/2020   **Master's degree in Archaeology (LM-02)**   📍 *Rome, Italy*
University of Rome La Sapienza
Thesis title: *Produzione vascolare dalla vetta del Monte Cimino (VT)*
Supervisors: Prof Andrea Cardarelli, Dr Barbara Barbaro
Grade: 110 with honours/110

01/2020   **Bachelor's Degree in Archaeological Sciences (L-01)**   📍 *Rome, Italy*
University of Rome La Sapienza
Thesis title: *Produzione vascolare dal contesto cultuale del Monte Cimino (VT)*
Supervisors: Prof Andrea Cardarelli
Grade: 110 with honours/110

Work experience

09/2022 – 10/2022   **Archaeological excavation**   📍 *Arcevia (AN), Italy*
Archeosistemi Cooperative Society. Via Nove Martiri, 11/A 42124 Reggio Emilia (RE)
Archaeological excavation of the protohistoric settlement of Monte Croce-Guardia (AN)
Director: Prof. Andrea Cardarelli, University La Sapienza, Rome. Archaeological operator, Compilation of US sheets, Reliefs and photoplans, Laboratory and cataloguing activities.

09/2021 – 12/2021   **3D reconstructions of buildings and artefacts**   📍 *Rome, Italy*
University of Rome La Sapienza, Piazzale Aldo Moro 5
Realization of 3D reconstructions of dwellings and artifacts from the protohistoric settlement of Monte Croce-Guardia (AN).

09/2021 – 11/2021	**Archaeological excavation** 📍 *Arcevia (AN), Italy*
	Archeosistemi Cooperative Society. Via Nove Martiri, 11/A 42124 Reggio Emilia (RE)
	Archaeological excavation of the protohistoric settlement of Monte Croce-Guardia (AN) Director: Prof. Andrea Cardarelli, University La Sapienza, Rome. Archaeological operator, Compilation of US sheets, Reliefs and photoplans, Laboratory and cataloguing activities.
09/2020 – 11/2020	**Archaeological excavation** 📍 *Arcevia (AN), Italy*
	Akhet S.R.L., Closellinaz, 44/A, 11010 Roisan (AO)
	Archaeological excavation of the protohistoric settlement of Monte Croce-Guardia (AN) Director: Prof. Andrea Cardarelli, University La Sapienza, Rome. Archaeological operator, Compilation of US sheets, Reliefs and photoplans, Laboratory and cataloguing activities.

Publications

Journal article 2023	**Tracing the human movements of three thousand years ago by volcanic grinding tools in the Final Bronze Age settlement of Monte Croce Guardia (Arcevia-Marche Region, central Italy)** Santi P., Cardarelli A., Bettelli M. Di Renzoni A., Cardarelli L., Paniccia C., Renzulli A., *Scientific Reports* 13, 7022
Journal article 2023	**Money or ingots? Metrological research on pre-contact Ecuadorian "axe-monies"** Montalvo Puente C. E., Lago G., Cardarelli L., Pérez Molina J. C., *Journal of Archaeological Science: Reports*, 49
Journal article 2022	**A deep variational convolutional Autoencoder for unsupervised features extraction of ceramic profiles. A case study from central Italy.** Cardarelli L., *Journal of Archaeological Science*, 144
Preprint 2022	**Money or ingots? Metrological research on pre-contact Ecuadorian 'axe-monies'** Montalvo Puente C. E., Lago G., Cardarelli L., Pérez Molina J. C.
Journal article 2022	**Dimensionality reduction for data visualization and exploratory analysis of ceramic assemblages** Cardarelli L., Lapadula A., *Archeologia e Calcolatori*, 33, 2
Journal article 2020	**Capienza delle forme vascolari, da un metodo open source all'uso di modelli regressivi: il caso dell'insediamento protostorico del Monte Cimino** Cardarelli L., *Archeologia e Calcolatori, 31*, 1

Experience gained during university education

09/2019 – 11/2019; 09/2018 – 11/2018; 09/2017 – 11/2017; 09/2016 – 11/2016; 09/2015 – 11/2015	**Archaeological excavation** 📍 *Arcevia (AN), Italy*
	University of Rome La Sapienza, Piazzale Aldo Moro 5
	Archaeological excavation of the protohistoric settlement of Monte Croce-Guardia (AN) Director: Prof. Andrea Cardarelli, University La Sapienza, Rome. Archaeological operator, Compilation of US sheets, Reliefs and photoplans, Laboratory and cataloguing activities.
06/2016 – 07/2016; 06/2015 – 07/2015	**Archaeological excavation** 📍 *Soriano nel Cimino (VT), Italy*
	University of Rome La Sapienza, Piazzale Aldo Moro 5
	Archaeological excavation of the settlement and place of worship at Monte Cimino (VT). Director: Prof. Andrea Cardarelli, La Sapienza University, Rome. Archaeological operator, Compilation of US sheets, Reliefs and photoplans, Laboratory and cataloguing activities.
11/2019	**Systematic archaeological survey** 📍 *Fratta Polesine (RO), Italy*
	University of Rome La Sapienza, Piazzale Aldo Moro 5
	Systematic archaeological survey of the protohistoric settlement of Frattesina di Fratta Polesine (RO). Director: Prof. Andrea Cardarelli, La Sapienza University, Rome. Archaeological operator, Laboratory and cataloguing activities.

| 01/2017 – 11/2017; 01/2019 – 12/2019 | **Laboratory work on archaeological material** | 📍 *Rome, Italy* |

University of Rome La Sapienza, Piazzale Aldo Moro 5
Laboratory activities on archaeological material from the protohistoric settlement of Monte Cimino (VT). Drawing ceramic materials; Cataloging via database (Microsoft Access).

Conference talks

2023
13° International Congress on the Archaeology of the Ancient Near East (ICAANE) Workshop Serialising, standardising, specialising: Investigating a techno-social nexus underlying social complexity. Cardarelli L., Computerised approaches for investigating the morphological standardization ofArslantepe VI A pottery, Copenhagen, 24 may 2023.

2020
IAS – Incontri di Archeologia 2020. Digital Humanities Session I-II Cardarelli L., Capienza delle forme vascolari, un metodo basato su strumenti e formati open source che include l'uso di modelli regressivi: il caso dell'insediamento protostorico del Monte Cimino. Rome, 19 november 2020.

Didactic activity

02/2022
Python vs R - An archaeological challenge Applied programming languages course to archaeology. XXXVI and XXXVII cycle of the Doctorate in *Patrimoni archeologici, storici, architettonici e paesaggistici mediterranei*. University of Bari 'Aldo Moro'.

03/2021
QGIS basic course Basic QGIS application to archaeology. XXXVI cycle of the Doctorate in *Patrimoni archeologici, storici, architettonici e paesaggistici mediterranei*. University of Bari 'Aldo Moro'.

Editorial work

Peer-review
Journal of Archaeological Science

International experience

| 03/2022 – 07/2022 | **Visiting Researcher** | 📍 *Vienna, Austria* |

Österreichisches Archäologisches Institut

IT skills

OS
Windows
GNU-Linux

Office & Editing	Microsoft Office Adobe Photoshop Adobe Illustrator Adobe InDesign GIMP
Editing video & content creation	Adobe Premiere Pro Adobe AfterEffects
GIS Softwares	Qgis Arcgis SAGAgis
Version control	Git
Database	Microsoft Access
Programming & markup	R Python HTML CSS Markdown Bash SQL LaTeX
Statistical software	Past SPSS
Computer graphics	Blender Unreal Engine Quixel Mixer Substance Painter Armor Paint