

Andrea Titolo

RESEARCH FELLOW, PHD

Department of Economics, University of Bologna

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Research Interests

Landscape Archaeology; Remote Sensing; GIS; Quantitative Analyses; Western Asia Archaeology

Current Academic Position

Research Fellow

Bologna, IT

UNIVERSITY OF BOLOGNA

12/2025-present

- Member of the 'ORIGINS' project
- Responsible for Quantitative and Computational Processing of Paleoclimate Data, Archaeological Data Collection and Computation

Past Academic Positions

Research Fellow

Turin, IT

TURIN UNIVERSITY

02/2025-12/2025

- Member of the project 'Governance strategies in the Southern Levant under the Neo-Assyrian domination'
- Responsible for the GIS, and Archaeological Landscape and Settlement Patterns research through Quantitative and Computational approaches

Research Fellow

Turin, IT

TURIN UNIVERSITY

02/2023-01/2025

- Member of the project 'Governance Policies and Political Landscapes in the Southern Levant during the Neo-Assyrian Empire'
- Responsible for the GIS, and Archaeological Landscape and Settlement Patterns research through Quantitative and Computational approaches

Research Fellow

Rome, IT

SAPIENZA UNIVERSITY OF ROME

07/2020-31/2023

- Member of the Project PRIN 2017: 'Fluid Crescent Water and Life in the Societies of the Ancient Near East'
- Responsible for the GIS, Remote Sensing, and Archaeological Landscape research

Industry work

ArcheoConsultant

Rome, IT

GIS SPECIALIST - OCCASIONAL CONSULTANT WORK

2023-present

- GIS Specialist

Education

PhD in Near Eastern Archaeology

Rome, IT

SAPIENZA UNIVERSITY OF ROME

10/2016-02/2020

- Dissertation: Beyond the River. Settlement Patterns and Models of Occupation along the Euphrates in Syria and Iraq during the Iron Age.
- Tutor: Prof. Davide Nadali

Master of Arts, Near Eastern Archaeology

Rome, IT

SAPIENZA UNIVERSITY OF ROME

09/2014-09/2016

- Thesis: Distribution and nature of settlements along the Middle Euphrates in Syria and Iraq in the Early Iron Age (X-IX sec. B.C.)
- Supervisor: Prof. Davide Nadali; Co-Supervisor: Dr. Sara Pizzimenti

Bachelor of Arts, Archaeology

Rome, IT

SAPIENZA UNIVERSITY OF ROME

09/2011-09/2013

- Thesis: Sargon II military campaign against Urartu (714 B.C.)
- Supervisor: Prof. Maria Giovanna Biga

Other Certified Educational Experiences

MosaicChrono Summer School

BIBRACTE EPCC

- Organized by L. Scholtus (University of Kiel), L. Dumont (University of Ghent), O. Nakoinz (University of Kiel)

Glux-en-Glenne, FR

02/09/2024-07/09/2024

Winter School R4 ARchaeologists

Pisa, IT

DEPARTMENT OF CIVILIZATIONS AND FORMS OF KNOWLEDGE, UNIVERSITY OF PISA

01/2020-02/2020

- Organized by the Mappa Project

Study Abroad Period

London, UK

UNIVERSITY COLLEGE LONDON (UCL)

03/2019-05/2019

- Aim: study and enhance skills and techniques of quantitative analysis in archaeology using R, with a specific focus on settlement pattern analysis
- Supervisor: Prof. Mark Altaweel

Study Abroad Period

Durham, UK

DURHAM UNIVERSITY

04/2019-06/2019

- Aim: study and enhance skills and techniques of the Landscape Archaeology and Remote Sensing, with a specific focus on orthorectification and georeferencing of the declassified CORONA satellite images
- Supervisor: Prof. Dan Lawrence

GIS Course

Rome, IT

ISTITUTO SPALLUCCI

10/2016

- GIS Open Source Advanced (QGIS)
- Organized by Terrelogiche SRL
- GIS Open Source: QGIS
- Organized by Terrelogiche SRL

Fieldwork

Field Director

Duhok, KR

KURDISH-ITALIAN RELAND ARCHAEOLOGICAL PROJECT

04/2023-present

- Archaeological Survey and Excavation
- Responsible for GIS and Computational Analyses

Member of Archaeological Expedition

Tyre, LB

LEBANESE-ITALIAN ARCHAEOLOGICAL EXPEDITION IN THE REGION OF TYRE

08/2019-02/2023

- Archaeological Survey
- Responsible for GIS and Remote Sensing Survey

Member of Archaeological Expedition

Dhi-Qar, IR

ITALIAN ARCHAEOLOGICAL EXPEDITION AT NIGIN

11/2015-02/2023

- Archaeological Excavation
- Responsible for GIS and Remote Sensing Survey

Archaeologist - Co-responsible for Archaeological Survey and GIS

Duhok, KR

RELAND ARCHAEOLOGICAL PROJECT

04/2024

- Archaeological Survey
- Directed by Dr. Bekas Al-Brifkany (Duhok DGA), and Prof. Paola Sconzo (University of Palermo)

Archaeologist - Co-responsible for Archaeological Survey and GIS

Duhok, KR

RELAND ARCHAEOLOGICAL PROJECT

10/2023

- Archaeological Survey
- Directed by Dr. Bekas Al-Brifkany (Duhok DGA), and Prof. Paola Sconzo (University of Palermo)

Archaeologist - Co-responsible for Archaeological Survey and GIS

Duhok, KR

RELAND ARCHAEOLOGICAL PROJECT

04/2023

- Archaeological Survey and Excavation
- Directed by Dr. Bekas Al-Brifkany (Duhok DGA), and Prof. Paola Sconzo (University of Palermo)

Archaeologist - Responsible for Archaeological Survey and GIS

Tyre, LB

LEBANESE-ITALIAN ARCHAEOLOGICAL EXPEDITION IN THE REGION OF TYRE

09/2022

- Archaeological Survey and Excavation
- Directed by Dr. Ali Badawi (DGA), Prof. M. Hayder (Lebanese University), and Prof. M. D'Andrea (Sapienza University of Rome)

Archaeologist - Area Supervisor

ITALIAN ARCHAEOLOGICAL EXPEDITION AT NIGIN

Dhi-Qar, IR

10/2021

- Archaeological Excavation

• Directed by Prof. D. Nadali (Sapienza University of Rome) and by Prof. A. Polcaro (University of Perugia)

Assistant Director

Lagodekhi, GE

LAGODEKHI ARCHAEOLOGICAL SURVEY PROJECT

07/2018

- Archaeological Survey

• Directed by Dr Kristen Hopper (Durham University) and Prof. Elena Rova (Ca' Foscari University of Venice)

Archaeologist - Area Supervisor

Dhi-Qar, IR

ITALIAN ARCHAEOLOGICAL EXPEDITION AT NIGIN

11/2017

- Archaeological Excavation

• Directed by Prof. D. Nadali (Sapienza University of Rome) and by Prof. A. Polcaro (University of Perugia)

Archaeologist

Manfredonia, IT

COPPA NEVIGATA

09/2017

- Archaeological Excavation

• Directed by Prof. A. Cazzella (Sapienza University of Rome).

Archaeologist

Dhi-Qar, IR

ITALIAN ARCHAEOLOGICAL EXPEDITION AT NIGIN

10/2016

- Archaeological Excavation

• Directed by Prof. D. Nadali (Sapienza University of Rome) and by Prof. A. Polcaro (University of Perugia)

Archaeologist

Manfredonia, IT

CAMPAGNA DI SCAVO A COPPA NEVIGATA

09/2016

- Archaeological Excavation

• Directed by Prof. A. Cazzella (Sapienza University of Rome).

Archaeologist

Dhi-Qar, IR

ITALIAN ARCHAEOLOGICAL EXPEDITION AT NIGIN

10/2015

- Archaeological Excavation

• Directed by Prof. D. Nadali (Sapienza University of Rome) and by Prof. A. Polcaro (University of Perugia)

Student

Cottanello, IT

CAMPAGNA DI SCAVO A COTTANELLO

09/2013

- Archaeological Excavation

• Directed by Prof. P. Pensabene (Sapienza University of Rome).

Journal Articles

Titolo, A., & Palmisano, A. (2025). From Villages to Empires: Archaeological Settlements of the South Levant from the Chalcolithic to the Byzantine Period. *Journal of Open Archaeology Data*, 13. <https://doi.org/10.5334/joad.158>

Palmisano, A., & **Titolo, A.** (2024). The good, the bad and the ugly: Evaluating open science practices in archaeology. *Archeologia e Calcolatori*, 35, 75–84. <https://doi.org/10.19282/ac.35.2.2024.09>

Sconzo, P., Simi, F., & **Titolo, A.** (2024). From the tigris to the banks of the euphrates: Post-flooding assessment at the tishreen dam reservoir, north syria. *Mesopotamia*, LIX, 193–213. <https://www.apicelibri.it/catalogo/mesopotamia-2024/477?path=catalogo>

Titolo, A. (2024). Normalized difference water index for cultural heritage. A reproducible method for monitoring flooded archaeological sites. *Mesopotamia*, LIX, 175–191. <https://www.apicelibri.it/catalogo/mesopotamia-2024/477?path=catalogo>

Titolo, A., & Palmisano, A. (2024). Using kart and GitHub for versioning and collaborating with spatial data in archaeological research. *Archeologia e Calcolatori*, 35, 107–118. <https://doi.org/10.19282/ac.35.2.2024.12>

Sconzo, P., Simi, F., & **Titolo, A.** (2023). Drowned Landscapes: The Rediscovered Archaeological Heritage of the Mosul Dam Reservoir. *Bulletin of the American Society of Overseas Research*, 389, 165–189. <https://doi.org/10.1086/724419>

Hayder, M., D'Andrea, M., Badawi, A., **Titolo, A.**, & De Paolis, P. (2022). The lebanese-italian archaeological project in the region of tyre: A landscape approach to archaeology and history. *Studia Eblaitica. Studies on the Archaeology, History, and Philology of Ancient Syria*, 8, 135–186. [https://www.harrassowitz-verlag.de/Studia_Eblaitica_8_\(2022\)/title_7162.ahtml](https://www.harrassowitz-verlag.de/Studia_Eblaitica_8_(2022)/title_7162.ahtml)

- Sconzo, P., Qasim, H. A., Al Besso, M., Glissmann, B., & **Titolo, A.** (2022). Investigating jubaniyah. A late chalcolithic site on the upper tigris river, iraqi kurdistan. Preliminary report. *MESOPOTAMIA. Rivista Di Archeologia, Epigrafia e Storia Orientale Antica*. <http://hdl.handle.net/10447/554804>
- Titolo, A.** (2021). Use of Time-Series NDWI to Monitor Emerging Archaeological Sites: Case Studies from Iraqi Artificial Reservoirs. *Remote Sensing*, 13(4), 786–786. <https://doi.org/10.3390/rs13040786>
- Titolo, A.** (2020). Assyrian imperial frontiers during the first millennium BC: The case of the Iraqi Middle Euphrates. In K. Gavagnin & R. Palermo (Eds.), “*Imperial Connections. Interactions and Expansion from Assyria to the Roman Period. Volume 2. Proceedings of the 5th “Broadening Horizons” Conference (Udine 5-8 June 2017)*” (pp. 203–215). EUT Edizioni Università di Trieste. <http://hdl.handle.net/10077/31106>

Book Chapters

- Caselli, A., & **Titolo, A.** (2020). Tools and objects from Tell Zorghul excavations (2015-2017). In D. Nadali & A. Polcaro (Eds.), *The Italian archaeological excavations at Tell Zorghul, Ancient Nigin, Iraq. Final report of the season 2015-2017* (pp. 183–218). Sapienza Università di Roma. https://www.andreatitolo.com/publication/2020-caselli-titolo-quadvo/Caselli_Titolo_QuVO_XVI_2020.pdf

InPress

- Sconzo, P., Simi, F., & **Titolo, A.** The submerged archaeological sites of the mosul dam reservoir. Evaluating emergence patterns with a new cost-efficient tool. In n.d. (Ed.), *Proceedings of the international conference on cultural heritage and new technologies, vienna*.

InPreparation

- D'Andrea, M., Haider, M., Badawi, A., **Titolo, A.**, & De Paolis, P. The lebanese-italian archaeological project in the region of tyre: Preliminary report on the 2021 season and following research activities. In *Bulletin d'Archéologie et d'Architecture Libanaises*.
- Titolo, A.**, Hopper, K. A., & Hewett, Z. Remote sensing of burial mounds in forested zones using freely available multispectral medium resolution satellite imagery. In *Archaeological Prospection*.

PhD Thesis (Unpublished)

- Titolo, A.** (2020). *A cavallo del fiume: Distribuzione degli insediamenti e modelli di occupazione lungo il fiume eufrate in siria e iraq nell'età del ferro* [PhD thesis, Sapienza Università di Roma, Dipartimento di Scienze dell'Antichità]. <http://hdl.handle.net/11573/1554655>
Unpublished Thesis.

Conferences and Congresses

- Titolo, A.**, & Palmisano, A. (2025, April 2). *Political landscapes in the southern levant during the iron age*. Invited ARWA lecture (online), 2 april 2025.
- Titolo, A.**, & Palmisano, A. (2024, December 13). *A tale of two kingdoms: The impact of the assyrian empire on judeah and israel*. Paper presented at the workshop The Geography of Large-Scale State Policies on Physical and Cultural Landscapes in Western Asia, 13 december 2024.
- Titolo, A.**, & Palmisano, A. (2024, June 18). *Approcci multidisciplinari per un'analisi dei sistemi insediativi e dei trend demografici nel lungo termine*. Paper presented at the EVOA Conference, 18-19 June 2024.
- Titolo, A.**, & Palmisano, A. (2023, December 13). *Using Kart and GitHub for versioning and collaborating with spatial data in archaeological research*. Paper presented at the 17th ArcheoFOSS Conference, 12-13 December 2023.
- Iacobucci, G., & **Titolo, A.** (2023, May 24). *Geomorphological and geoarchaeological setting of the Lower Mesopotamian Plain. The case study of Tell Zorghul archaeological site and its human-environmental interaction*. Paper presented at the 13th International Conference on Archaeology of the Ancient Near East (ICAANE) , 22-26 may 2023.
- Sconzo, P., Simi, F., & **Titolo, A.** (2023, May 24). *From the Tigris to the Euphrates banks. Post-flooding assessment at the Tishreen Dam Reservoir, North Syria*. Paper presented at the 13th International Conference on Archaeology of the Ancient Near East (ICAANE) , 22-26 may 2023.
- Titolo, A.** (2023, May 24). *Normalized Difference Water Index for Cultural Heritage. A Reproducible Method for Monitoring Flooded Archaeological Sites*. Paper presented at the 13th International Conference on Archaeology of the Ancient Near East (ICAANE) , 22-26 may 2023.

- Titolo, A.** (2023, March 9). *Evaluating the Potential of Cartographic and Satellite Data for Landscape Archaeology in the area of Tell Zurghul*. Paper presented at the 4th Mesopotamian Archaeology Conference at the University of al-Qadisiyah, Diwaniyeh, 09 mar 2023.
- Sconzo, P., Simi, F., & **Titolo, A.** (2023, January). *Paesaggi sommersi. Metodologie di monitoraggio, prevenzione e salvaguardia dei siti a rischio del bacino della diga di mosul, irak. Il progetto RE-land*. Paper presented at the seminar series “Scienze Applicate ai Beni Culturali,” palermo, 27 jan 2023.
- Iacobucci, G., Delchiaro, M., Troiani, F., **Titolo, A.**, & Nadali, D. (2022, September). *Land-surface quantitative analysis of the alluvial fans along the northern margin of damascus basin (syria): Preliminary results and geomorphological mapping*. Paper presented at the “10th international conference on geomorphology, coimbra, portugal, 12–16 sep 2022, ICG2022-35”.
- Sconzo, P., Simi, F., & **Titolo, A.** (2021, October). *The submerged archaeological sites of the mosul dam reservoir. Evaluating emergence patterns with a new cost-efficient tool*. Paper presented at the conference on cultural heritage and new technologies.
- Titolo, A.** (2021, April). *The damascus oasis: Past researches and new directions in the analysis of archaeological settlement patterns*. Paper presented at the workshop “fluid crescent. Water and life in the societies of the ancient near east”.
- Titolo, A.** (2021, April). *Water, landscapes and settlements along the river. Case studies from the syrian middle euphrates*. Paper presented at the 12th ICAANE (international congress on the archaeology of ancient near east). Online conference due to covid-19.
- Titolo, A.** (2020, February). *Aspetti regionali della distribuzione insediativa lungo l'eufrate nell'età del ferro (x-vii secolo a.c.)*. Paper presented at SSDA 2020 (seminario della scuola di dottorato di archeologia di sapienza).
- Titolo, A.** (2020, January). *Monitoring emerging archaeological sites using multitemporal NDWI: Case studies from iraq*. Paper presented at the BANEA conference.
- Titolo, A.** (2019, June). *Archaeological landscape of the lower syrian euphrates valley: An integrated approach towards the reconstruction of the settlement patterns during the iron age*. Paper presented at the broadening horizons 6 conference.
- Titolo, A.** (2019, January). *L'età del ferro nell'area dell'eufrate siriano: Siti e ricostruzione del paesaggio archeologico*. Paper presented at SSDA 2019 (seminario della scuola di dottorato di archeologia di sapienza).
- Titolo, A.** (2018, June). *Assyrian imperial frontiers of the first millennium BC, the case of the iraqi middle euphrates*. Paper presented at the broadening horizons 5 conference.
- Titolo, A.** (2018, April). *Settlement patterns, models of occupation, and assyrian presence in the west. Case study from the middle euphrates region*. Poster presented at the 11th ICAANE (international congress on the archaeology of ancient near east).
- Titolo, A.** (2018, March). *On the edge of the empire: Riverine landscape and settlement patterns in the haditha dam region during the iron age*. Paper presented at the BANEA conference.
- Titolo, A.** (2018, January). *Pattern insediamentali nell'età del ferro: Il caso studio del medio eufrate iracheno*. Paper presented at SSDA 2018 (seminario della scuola di dottorato di archeologia di sapienza).

Organized Conferences

BH7 (Broadening Horizons 7)

SAPIENZA UNIVERSITY OF ROME

Rome, IT

02/2025

- Organized together with F. Cappella, M. Ceravolo, L. De Vito, N. Khallas, V. Oselini, C. Reali, L. Volpi

SSDA 2020 (Seminario della Scuola di Dottorato di Archeologia di Sapienza)

SAPIENZA UNIVERSITY OF ROME

Rome, IT

02/2020

- Organized together with S. Bossi, B. Brancazi, G. Briatico, A. Caselli, A.L. Corsi, F. Lobera Corsetti, E. Lucci, F. Nicotera, G. Previti, R. Rotunno, L. Volpi

SSDA 2019 (Seminario della Scuola di Dottorato di Archeologia di Sapienza)

SAPIENZA UNIVERSITY OF ROME

Rome, IT

01/2019

- Organized together with B. Brancazi, A. Caselli, A.L. Corsi, E. Lucci, S. Marino, R. Rotunno, L. Volpi

SSDA 2018 (Seminario della Scuola di Dottorato di Archeologia di Sapienza)

SAPIENZA UNIVERSITY OF ROME

Rome, IT

01/2018

- B. Brancazi, E. Casadei, A. Caselli, E. Lucci, S. Marino, F. Porta

Awarded Scholarships

Mobility of PhD Students

SAPIENZA UNIVERSITY OF ROME

- Project Name: MATTER

2019

Project Members: A. Titolo, L. Volpi

Mobility of PhD Students

SAPIENZA UNIVERSITY OF ROME

- Project Name: Tua-ViOr

2019

Project Members: A. Caselli, A. Jabbour, I.

Sayegh, A. Titolo

Teaching Experience

Students Lab Teaching

DEPARTMENT OF ANTIQUITIES

- Lab design; weekly lectures on Landscape Archaeology and GIS, with hands-on interactive teaching of QGIS; office hours

Sapienza University of Rome

03/2023 - 06/2023

Students Lab Teaching

DEPARTMENT OF ANTIQUITIES

- Lab design; weekly lectures on Landscape Archaeology and GIS, with hands-on interactive teaching of QGIS; office hours

Sapienza University of Rome

02/2022 - 06/2022

Other Working Experiences

Data Entry

ITALIAN ARCHAEOLOGICAL EXPEDITION AT NIGIN

Dhi-Qar, IR

2015-2020

- Data entry of the archaeological documentation of the Italian Archaeological Expedition to Nigin (Iraq) directed by Prof. D. Nadali (Università di Roma Sapienza) and by Prof. A. Polcaro (Università di Perugia)

Students Lab Supervisor

ITALIAN ARCHAEOLOGICAL EXPEDITION AT EBLA

Rome, IT

2017-2020

- Supervisor of a student lab for the Digitalization of the topographical documentation of the Italian Archaeological Expedition in Syria (Tell Mardikh-Ebla), directed by Prof. Paolo Matthiae

Data Entry

LAGODEKHI ARCHAEOLOGICA SURVEY PROJECT

Lagodekhi, GE

2018

- Data entry of the archaeological documentation of the archaeological survey in the province of Lagodekhi (Georgia), directed by Dr Kristen Hopper (Durham University) and Prof. Elena Rova (Ca' Foscari University of Venice)

Data Entry

ARCHAEOLOGICAL MISSION TO COTTANELLO

Cottanello, IT

2013

- Data entry of the archaeological documentation of the excavation at the "Villa di Cottanello/Collesecco (RI)" directed by Prof. P. Pensabene (Sapienza University of Rome)

Online Certified Educational Experiences

Python Foundation for Spatial Analysis

TEACHER: UJAVAL GHANDI, SPATIAL THOUGHTS

07/2022

End-to-End Google Earth Engine

TEACHER: UJAVAL GHANDI, SPATIAL THOUGHTS

03/2022

Introduction to Google Earth Engine

TEACHER: DR. ALEMAYEHU MIDEKISA, GEOSPATIAL DATA SCIENTIST, UNITED STATE GEOLOGICAL SURVEY (USGS) - EROS

04/2020

Learning the FOSS4g Stack: QGIS 3.0 Desktop

TEACHER: ARTHUR J. LEMBO JR., PROFESSOR, UNIVERSITY OF SALISBURY, DEPARTMENT OF GEOGRAPHY AND GEOSCIENCE

04/2020

Learning the FOSS4g Stack: Geoserver

TEACHER: ARTHUR J. LEMBO JR., PROFESSOR, UNIVERSITY OF SALISBURY, DEPARTMENT OF GEOGRAPHY AND GEOSCIENCE

03/2020

Learning the FOSS4g Stack: Spatial SQL with Postgres/PostGIS

TEACHER: ARTHUR J. LEMBO JR., PROFESSOR, UNIVERSITY OF SALISBURY, DEPARTMENT OF GEOGRAPHY AND GEOSCIENCE

03/2020

Complete Google Earth Engine for Remote Sensing and GIS

TEACHER: MINERVA SINGH, PHD, UNIVERSITY OF CAMBRIDGE

03/2020

Language Proficiency

Italian

MOTHER TONGUE

English

IELTS CERTIFICATE (22/03/2018)

- Reading: 8.5
- Writing: 7.0
- Speaking: 7.0
- Listening: 8.5
- Overall Band Score: 8.5
- CEFR Level: C1

French

READING: BASIC

Arabic

SPEAKING: BASIC

Computer and Technical Skills

GIS Softwares

QGIS, ArcGIS PRO, ARCMAP, ERDAS IMAGINE, GLOBAL MAPPER

- Very good knowledge OF QGIS 2.X/ 3.X
- Basic knowledge of ArcGIS Pro, Arcmap, Erdas Imagine and Global Mapper

Programming

R, RSTUDIO, JAVASCRIPT, GOOGLE EARTH ENGINE, SQL, PYTHON, HTML, CSS

- Good knowledge of R, Rstudio, and VSCodium for quantitative and statiscal analysis and GIS software integration
- Good knowledge of Google Earth Engine and JavaScript aimed at remote sensing analyses and satellite images processing
- Knowledge of SQL aimed at spatial analyses and spatal database management
- Basic knowledge of Python aimed at spatial data visualisation and GIS integration
- Good knowledge of HTML and CSS for static website creation

Version Control

KNOWLEDGE OF GIT

Office

VERY GOOD KNOWLEDGE OF WORD PROCESSORS, SPREADSHEETS, AND DATABASES

Graphics Software

GOOD KNOWLEDGE OF PHOTO EDITING AND VECTOR GRAPHICS SOFTWARES

Signature

