Dr Lucia Michielin

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Current Position

EFI Digital Skills Training Manager

2020 - Present

Centre for Data, Culture, & Society and Edinburgh Future Institute

I manage and develop the CDCS Training Programme, which seeks to advance training on data-driven and applied digital methods for researchers across the College of Arts, Humanities, and Social Sciences. I am in charge of all aspects of the programme from the selection of themes and courses to be offered, to the planning of the allocated budget (~£30k per annum). The programme currently entails a mix of online and in-person delivery. I also organised three summer schools on data & text analysis.

Education

PhD in Classical Archaeology

2014 - 2019

University of Edinburgh

Thesis title: 'Fores et fenestrae. A Computational Study of Doors and Windows in Roman Domestic Space. Supervised by Dr Ben Russell and Prof Jim Crow and examined by Dr Dominik Maschek and Dr Xavier Rubio-Campillo

Scuola di Specializzazione in Archaeological Heritage

2011 - 2013

Università degli Studi di Padova

Distinction, 70/70 cum laude

MSc in Geotechnologies for Archaeology

2010

Centre for Geo-technologies, Università degli Studi di Siena

Distinction

MSc in Classical Archaeology

2007-2009

Università degli Studi di Padova

Distinction, 110/110 cum laude

BA in Classical Archaeology and Ancient Topography

2005-2007

Università degli Studi di Padova

Distinction, 110/110 cum laude

Publications

Monographs:

2021: Fores et fenestrae. A Computational Study of Doors and Windows in Roman Domestic Space. Archaeopress, Roman Archaeology 82.

Edited Volumes:

2019: Theoretical Roman Archaeology Journal, 2(1), guest editor with M. Astolfi and K. O'Donnell.

Articles & Book Chapters:

Forthcoming: Osborne N., Helgason I., Michielin L., Smyth M., Panneels I., Lechelt S., Parkinson C., Sulaiman Y., Warren K., Ross J. 'Digital and Data Literacy and Models for Data Training and Upskilling for the Future Creative Industries' in *Creative Data Catalysts: Encouraging Innovation Through Technology in the Creative Industries* (editors: Terras M., Speed C., Osborne N., Jones V.).

Forthcoming: 'Impact of (low) natural light in choice and perception of Roman house decoration' in *Quantifying the Subjective? Recent developments within Sensory Archaeology*, Special Issue of Time and Mind Journal.

In Press: 'Shedding Light in Roman Houses: Using 3D Reconstructions to Analyse the Use of Natural Light' in *Understanding Roman Archaeology by Experiment: A Handbook*, Bloomsbury.

2022: Notarian M., Carpentero G., Michielin L., Franconi T.V., Rice C.M., Bloy D. and Farney G.D., 'Digital Vacone: The Upper Sabina Tiberina Project's Transition from 2B Pencils to 3D Mesh', *Studies in Digital Heritage*, Vol 4, No.2.

2019: Michielin L., Astolfi M. and O'Donnell K., 'Increasing International Perspectives in Theoretical Roman Archaeology', *Theoretical Roman Archaeology Journal*, 2(1).

2016: Michielin L. and Strapazzon G., 'Il caso del sito delle Bestie Ferite (Aquileia). Dai sistemi proprietari non comunicanti ad un sistema integrato di gestione dei dati delle campagne di indagine', in P. Basso, A. Caravale, P. Grossi (eds.), ARCHEOFOSS. Free, Libre and Open Source Software e Open Format nei processi di ricerca archeologica. Atti del IX Workshop (Verona, 19-20 giugno 2014), 106-114.

2015: Michielin, L. Novello M., Santi M., 'Dal pronto intervento al restauro virtuale: il caso dello scavo della domus delle "Bestie Ferite" ad Aquileia (UD)' in *AISCOM. Atti Accademia Italiana per lo Studio e la Conservazione del Mosaico*, XX, 429-436.

2015: Faresin E., Boschetti C, Salemi G., Salvadori M., Michielin L., 'Uno studio interdisciplinare del mosaico delle Bestie Ferite di Aquileia: rilievo 3D e rapid prototyping', in *AISCOM. Atti Accademia Italiana per lo Studio e la Conservazione del Mosaico*, XX, 703-710.

2012: Pescarin S., Lucci Baldassarri G., Cerato I., Michielin L., 'Laser scanner e Computer Vision a Montegrotto', in Montegrotto Terme e il termalismo in Italia. Aggiornamenti e nuove prospettive di valorizzazione Atti del convegno Nazionale (14-15 Giugno) 2011.

Digital Resources:

2021–2022: Creation of online toolboxes 'Pathways of Learning' on digital and data-driven methods for researchers in Humanities and Social Science.

Michielin L. Geographic Information Systems (Forthcoming)

Michielin L., Wheldon D. Working with 3D Data

Havens L., Michielin L. Text Analysis

Michielin L. Statistical Analysis

Michielin L., Wang X. Sentiment Analysis

Michielin L. Data Visualisation

2020: Sufi S., Nenadic A., Ainsworth R., Michielin L., Crouch S., Antonioletti M., Peru G. 'Guidance for running online training' DOI 10.5281/zenodo.3923947

Teaching Experience

Digital and Computational Methods Instructor

2019 - Present

Centre for Data, Culture, & Society, University of Edinburgh

Designed and taught online and in-person courses and workshops on databases theory and practice, data visualisation and statistics, version control, geographic information systems, data wrangling and cleaning, introduction to programming, data and text analysis, OCR, PCA, cluster analysis, and inferential statistics

Data Carpentry Instructor

2017 - Present

University of Oxford, University of Edinburgh

I taught hands-on online and in-person training sessions in data organisation and data analysis

GIS for Archaeology workshop

2017

School of History, Classics, and Archaeology, University of Edinburgh

I designed and taught a workshop on the uses of Geographical Information Systems for Archaeologists

Guest Lecturer & Tutor 2014 – 2017

School of History, Classics, and Archaeology, University of Edinburgh

I taught classes for the courses of Roman Art and Archaeology (sub-honours course) and Archaeology of Architecture (honours course). I taught tutorials and marked essays and tests for the courses of Roman World 1A and 1B (the Roman Republic and Empire), Greek Art and Archaeology, and Roman Art and Archaeology

Digital Survey Instructor

2016 - Present

University of Edinburgh, Apolline project, Rutgers University, Brown University

I thought photogrammetry, GIS, and digital survey at the excavations of Aeclanum (AV) and Vacone (RI)

Recent Professional Experience

Training Fellow 2019 - 2020

Centre for Data, Culture, & Society, University of Edinburgh

I developed and delivered online and in-person data-driven training to enhance digital literacy across the Humanities and Social Science College, while identifying and implementing best practices of remote training delivery and asynchronous support

Coordinator of the Data Skills Workforce Development Data Carpentry

2020

Software Sustainability Institute, University of Edinburgh

I managed and planned a series of online workshops focused on data organisation and data mining, these courses were funded by the Scottish Funding Council (SFC) and aimed to upskill the Scottish workforce (budget £45 K)

Web Developer for the Database of Byzantine Literati Project

2019 - 2020

School of History, Classics, and Archaeology, University of Edinburgh

I implemented the Edinburgh Database of Byzantine Literati and maintained its Drupal-based website

Digital Research Service Ambassador

2019

Digital Research Service, University of Edinburgh

I conducted outreach activities, developed knowledge-sharing networks within schools and colleges, and promoted the Digital Research Service in local research communities

Edinburgh Carpentries Coordinator

2019

Software Sustainability Institute, University of Edinburgh

I consolidated and developed sustainability for the Edinburgh Carpentry initiative, and performed UK Carpentry administration duties and supported outreach for the Edinburgh Carpentries project

Internships

Internship at the Soprintendenza della Regione Veneto

2012

Soprintendenza della Regione Veneto

I developed a GIS system for storing and analysing Archaeological data of the Rovigo area

Internship at the Virtual Heritage Lab

2010 - 2011

Virtual Heritage Lab, Institute for Applied-Technologies in Cultural Heritage (CNR)

I worked on a series of international digital cultural heritage project with task ranging from managing GIS data and process 3D models

Alan Turing Online Training Grant

2021

Alan Turing Institute

Organisation of the Digital Humanities & Research Software Engineering Virtual Summer School (£ 9,345 for the whole week £ 1,680 for the Edinburgh-led day). Partners: Alan Turing Institute, University of Cambridge and King's College London

Baldwin Brown Travelling Scholarship

2014 - 2017

Baldwin Brown Travelling Scholarship

Scholarship to Support on-site survey during my PhD (£ 1,183)

School Doctoral Teaching Award

2014 - 2017

School of History, Classics, And Archaeology

Scholarship to Support my PhD (£ 45 K)

Assegno di Ricerca 2013 – 2014

Universita' di Padova

Award granted by the Università degli Studi di Padova for the creation and management of a GIS platform of the excavation of the 'Bestie Ferite' in Aquileia (two separate awards of $\sim £1200$)

First ranked Award 2010

Centre for Geotechnologies, Univerisità' di Siena

Award granted as top of the class for the master Master of Science in Technology applied to archaeology ($\sim £ 2 \text{ K}$)

Presentations & Posters Selection

- Michielin L., Otty L. Promoting Open Research Practices in the Arts and Humanities, Edinburgh Open Research Conference 2023
- Otty L., Michielin L., Wittie J. The CDCS Rapid Prototyping Sandpit, DH-RSE Summer School 2023
- Nenadic A., Antonioletti M., Steyn J., Walker A., Michielin L., Sauze C., Konovalov A., Cohen J. Carpentries Superstars: How to Make the Best of Your Teaching Experience, Collaboration Workshop 2023
- Impact of (low) natural light in choice and perception of Roman house decoration, Nordic TAG 2022 –Nordic Theoretical Archaeology Group
- Teaching Digital Methods at the University of Edinburgh. The CDCS Example, Digital Humanities

Roundtable: 'Where' Affects 'How' We Teach 2022

- Teaching and Learning Digital Methods and Skills for Cultural Heritage, Digitalisation and Interdisciplinary Research in Social Science AHRC Techne' 2022 (Brunel University London)
- Data Analysis. How to do it?, SGSAH workshop 2022. Data, Empirical Research and Legal Scholarship What is it all about? Scottish Graduate School for Arts Humanities
- Supporting CAHSS Researchers Through Digital Skills Training; the CDCS Example, Digital Skills Festival 2021
- Gaul N., Spingou F., and Michielin L. Before and After 1204: A New Database on Byzantine Literati and the Case of the Choniates Brothers, Digital Workshop. Bridging the Gap: the Prosopography of a Fragmented World (13th Cent.) 2021
- Antonioletti M., Bouquin D., Katz D.S., Michielin L., Sauze C., and Whalley L. What does training in software sustainability look like?, SSI Collaboration Workshop 2019 Speed Blog Post Series
- Shedding Light in Roman Houses: Using 3D Reconstructions to Analyse the Use of Natural Light, TRACamp 2018 Theoretical Roman Archaeology Workshop on Experimental Archaeology
- Michielin L. and Soucek J. Where imagination fails: New possibilities of presenting the unexcavated, CAA UK 2018 -

Computer Application and Quantitative Methods in Archaeology

- Lightning the ancient Rooms: Using the 3D reconstructions to analyse the importance of the doors and windows barriers in the life of the Roman Private Houses, AIAC 2018 International Congress of Classical Archaeology
- The "Ikea" of Roman Doors. Standardization in Hinge Production across Imperial Italy, **2018 RAC/TRAC** Roman Archaeology Conference and Theoretical Roman Archaeology Conference
- "The Brick Fever": Tracing the Fluidity of Roman Houses' Boundaries through the Analysis of Changes in Doors and Windows, University of Edinburgh Archaeology Seminar Series 2017
- 'Doors and Windows through the Romans eyes: Literary, epigraphic and visual sources: Some examples', University of Edinburgh Classics Postgraduate Seminars 2016
- A foot in the door. A new approach to the analysis of doors and windows in Roman houses, RAC/TRAC 2016 Roman Archaeology Conference and Theoretical Roman Archaeology Conference
- 'La ricostruzione 3D della Domus delle "Bestie Ferite" di Aquileia', **ArcheoFOSS 2013** Open Source, Free Software e Open Format in the Archaeological Research Projects
- A theoretical approach to 3D reconstruction. The case study of Aquileia in the late antiquity, Heritage and Cityscapes International Workshop
- Una Pipeline open per la ricostruzione 3D in archeologia, The GNewArchaeology Workshop 2011

Conferences & Intensive Course Organisation

Summer Schools in Text & Data Analysis

2021 - 2023

Centre for Data, Culture, & Society (Edinburgh University)

Three iterations (one online and two in-person). Week-long hands-on events with an average of 100 requests each year

Digital Humanities & Research Software Engineering Summer School

2021 - 2023

Centre for Data, Culture, & Society (Edinburgh University)

In collaboration with Alan Turing Institute, University of Cambridge, King's College London. Two iterations (one online, one hybrid)

SFC Data Carpentry Workshop Series

2020

Software Sustainability Institute (University of Edinburgh)

Series of seven two-day online workshops with the aim of upskilling the Scottish workforce

28th Theoretical Roman Archaeology Conference

2018

School of History, Classics, and Archaeology (University of Edinburgh)

Head of the Local Organising Committee, liaise with the RAC Organising Committee

GIS in Archaeology Workshop Series

2012

University di Padova

Data Driven & Digital Skills

Main Programming Languages (text and data analysis, statistics, data visualisation, web scraping): R, Python

Other Coding Languages: Php, Css, Regex, LaTeX, Markdown, HTML

Databases: Access, OpenBase, SQL and SQLite, SpatialLite

2D and 3D Modelling: Rhinoceros, Autodesk, 3D Studio Max, Blender, AutoCAD

GIS and Remote Sensing: ESRI ArcGIS, GRASS, QGIS

Laser Scanner and Total Station: Riegl, Trimble, Leika, Totpcon

Photogrammetry and 3D Processing: Metashape, MeshLab, 3DF Zephyr, Meshroom

Network Analysis: Gephi

Graphics and Web Developing: Photoshop, Gimp, Illustrator, Canva, Drupal, WordPress

2016 – Present: GIS and survey specialist for the Upper Sabina Tiberina Project (Vacone), Rutgers University, Brown University (Roman Villa)

2016 – 2018: Survey coordinator for the Aeclanum Excavation, University of Edinburgh and Apolline Project (Roman Town)

2013 – 2014: GIS supervisor for the "Domus delle Bestie Ferite" excavation in Aquileia (UD-Italy), Universita' di Padova (Roman Villa)

2011: Excavation and survey at the Canaro and Cavarzere excavations, ArchaeoEd s.r.l (Roman and Medieval settlements)

2008: Excavation and survey at the Riva del Garda excavation, Cora s.n.c. (Neolithic settlement)

2004 – 2007: Excavation and survey at a series of Universita' di Padova in Italy and Croatia (Roman villas and Medieval settlements)

Academic References

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and Classics
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Prof Melissa Terras Professor of Digital Cultural Heritage University of Edinburgh m.terras@ed.ac.uk Dr Ben Russell Senior Lecturer of Classical Archaeology University of Edinburgh ben.russell@ed.ac.uk