



TUESDAY MORNING

8:30 AM - Keynote Address

Dr. Ken Kvamme
SCE Auditorium

9:30 AM

Coffee Break

General Papers

General - GIS Room: SCE House

9:50 AM

Caswell, Edward, *An Analysis of Selected Variables that Affect the Production of Cost Surfaces*
10:10 AM

Becker, Daniel, Christian Willmes, Andreas Bolten, Maria de Andrés-Herrero, Gerd-Christian Weniger, Georg Bareth,

Influence of Differences in Digital Elevation Models and their Resolution on Slope-Based Site Catchment Modelling

10:30 AM

Beusing, Ruth, *Temporal-GIS Tools for Mixed and Meso-Scale Archaeological Data*

10:50 AM

James, Vivian, *Context as Theory: Towards Unification of Computer Applications and Quantitative Methods in*

Archaeology

11:10 AM

Sharp, Kayeleigh, *Testing the 'Small-Site' Approach with Multivariate Spatial Statistical and Archaeological Network Analysis*

11:30 AM

Groen, Mike, *Geospatial Analysis, Predictive Modelling and Modern Clandestine Burials*

11:50 AM

Slayton, Emma, Jan Athenstädt, Corinne Hofman, Jan

Hildenbrand, *Seafaring with Mental Sign Posts: Connecting*

Materials with Canoe Routes in the Archaic Age Northern Lesser Antilles

Open Open Open. The Rise of Open Scientific Publishing and the Archaeological Discipline: Managing the Paradigm Shift

Education and Dissemination Room: SCE 216

Organizers: Arianna Traviglia, Xavier Rodier

9:50 AM

Rocks-Macqueen, Doug, Tom Levy, *The Last of the Publishers*

10:10 AM

Roued-Cunliffe, Henriette, Peter Jensen, *What is Open Data in an Archaeological Context?*

10:30 AM

Brin, Adam, Francis Pierce-McManamon, Leigh Anne Ellison, *The Challenges of Open Access for Archaeological Repositories*

10:50 AM

Kondo, Yasuhisa, Atsushi Noguchi, *Best Practices and Challenges in Promoting Open Science in Archaeology: Two Narratives from Japan*

11:10 AM

Rodier, Xavier, Olivier Marlet, *How to Combine Archaeological Archives, Linked Open Data and Academic Publication, a French Experience*

11:30 AM

Buard, Pierre-Yves, Elisabeth Zadora-Rio, *Publishing an Archaeological Excavation Report in a Logistic Workflow*

11:50 AM

Kansa, Eric, Anne Austin, Ixchel Faniel, Sarah Kansa, Ran Boynter, Jennifer Jacobs, Phoebe France, *A Reality Check: The Impact of Open Data in Archaeology*

Same as it ever was... Same as it ever was

Critical Reflections Room: SCE 217

Organizers: Hugh Corley, Lorna-Jane Richardson

9:50 AM

Pageau, Hanna, *An Inclusive Archaeology: Being Able in Archaeology*

10:10 AM

Foreman, Penelope, *"Well, actually...": The Othering of Women in the Computing and Programming Communities and Its*

Effects on Digital Archaeology

10:30 AM

Ni Chiobhain Enqvist, Delia, *Whose (Maritime) Archaeology is It Anyway?*

10:50 AM

Hassett, Brenna, Suzanne Pilaar Birch, Victoria Herridge, Rebecca Wrapp Sykes, *TrowelBlazers: Raising Horizons for a*

Diverse Digital Archaeology

11:10 AM

Corley, Hugh, *Privilege and Digital Archaeology*

11:30 AM

Richardson, Lorna-Jane, *Digital Archaeology and Digital Inequalities: A View from a Sociology Department*

11:50 AM

Discussion

Urbanism at the Micro, Meso and Macro Scales: Advances in Computational and Quantitative Methods to Study Cities and their Built Environments

GIS Room: SCE Auditorium

Organizers: Eleftheria Paliou, Adrian Chase

- 9:50 AM **Cabaniss, Andrew**, *Diversity from the Bottom Up: Modeling Cities as Communities of Diverse Households*
- 10:10 AM **Cesaretti, Rudolf**, *Re-Evaluating Settlement Population Estimation: An Analogue-Based Method for Modeling Patterned Variation in Population Density*
- 10:30 AM **Levine, Evan, Daniel Plekhov**, *Patterns of Urbanism in Bactria: Reevaluating a Paradigm Through Remote Sensing*
- 10:50 AM **Hermitt, Elijah, Erika Maxson, Kirk French, Damien Marken, Derek Shaffer, Timothy Murtha**, *Hydrologic Design in Three Maya Cities: Using Regional Topographic Data, Hydrologic Analysis in GIS and Archaeology for a Comparative Analysis of Palenque, Tikal, and El Peru*
- 11:10 AM **Baumanova, Monika, Ladislav Smejda, Heinz Ruther**, *The Streets of Timbuktu Old Town. Moving Goods, People and Ideas on the Coast of the Sahara*
- 11:30 AM **Shpuza, Ermal**, *The Effect of Gridiron Street Pattern on the Urban Growth of Adriatic and Ionian Coastal Cities 1800-2010*
- 11:50 AM **Crawford, Katherine**, *Unravelling Urban Religious Landscapes: Modelling Processions at Ostia*
- 12:10 PM **Klassen, Sarah, Jonathan Weed, Damian Evans**, *Discerning the Urban Morphology of Angkor Using a Semi-Supervised*

Algorithm for Manifold Learning

The Creation of Big Data Labs for Archaeology, Heritage, and Global Initiatives

Broader View - Digital Archaeology and the Humanities Room: SCW 460/462

Organizers: Thomas Levy, Michael Decker

- 9:50 AM **Decker, Michael, Thomas Levy, Maurizio Forte, Ethan Watrall**, *Introduction*
- 10:00 AM **Decker, Michael**, *CVAST: The USF Center for Virtualization and Applied Spatial Technologies*
- 10:20 AM **Levy, Thomas, Margie Burton**, *The UC San Diego Center for Cyber-Archaeology and Sustainability*
- 10:40 AM **Forte, Maurizio**, *The Dig@Lab at Duke University*
- 11:00 AM **Watrall, Ethan**, *MATRIX: The Center for Digital Humanities & Social Sciences*
- 11:20 AM **Tanasi, Davide**, *Learning Through Objects: 3D Digital Imaging, 3D Printing and Haptic Technology for Public Outreach in Archaeology*
- 11:40 AM **Colobran, Miquel, Juan Antonio Barcelo, Igor Bogdanovic**, *Reusing Archeological Information to Improve Modeling and Research: An Interoperability Data Schema*
- 12:00 PM **Watrall, Ethan**, *Mbira: A Platform to Build, Serve, and Manage Mobile Heritage Experiences*

NEH Roundtable on Advanced Challenges in Theory and Practice in 3D Modeling

3D Acquisition / Object Modeling Room: SCW 464

Organizers: Alyson Gill, Heather Richards-Rissetto, Lisa Snyder

- 9:50 AM **Carter, William**, *The Life of Attributes: Meta and Paradata as 3D Point and Object DNA for Heritage Providence*
- 10:10 AM **Clinton, Miriam**, *A Workflow to Integrate 3D Data Acquisition with Traditional Artifact Study? Lessons from Moulana*
- 10:30 AM **Ulguim, Priscilla**, *3D Digital Models and Bioarchaeology: Challenges and Proposals for Practice*
- 10:50 AM **Massari, Lauren, William Rourke, Shayne Brandon, Jama Courtney, Worthy Martin, Chip German**, *Challenges in Processing, Delivering, and Archiving Large Amounts of 3D Data*
- 11:10 AM **Mudge, Mark**, *Computational Photography, Scientific Imaging, and the Preservation of 3D Digital Representations*
- 11:30 AM **Richards-Rissetto, Heather**, *Challenges of Peer-Review: Where Does 3D Archaeological Scholarship Fall under the Umbrella of Digital Humanities Scholarship?*
- 11:50 AM **Richards-Rissetto, Heather, Alyson Gill**, *Roundtable*

Rip – Model – Learn: Towards the Total Model

Broader View - Digital Archaeology and the Humanities Room: SCW 466/468

Organizers: Carlo Bianchini, Alfonso Ippolito, Carlo Inglese, Luca Senatore

- 9:50 AM **Luce, Fabio**, *Digital Surveying and Ideal Reconstruction for Total Hybrid Model: The Case of Fort Presanella in Val di Sole*
- 10:10 AM **Filippucci, Marco, Fabio Bianconi, Federica Magi Meconi**, *Models and Parameterization of the Five Orders of Architecture*
- 10:30 AM **Eve, Stuart, Guy Hunt, Michael Johnson, Jessica Ogden, John Layt**, *10 Years of Online Archaeological Databases - Revolution, Convolution, Evolution*
- 10:50 AM **Empler, Tommaso**, *3D Modeling to Reconstruct a Paleontological Site: Museum of Casal de' Pazzi in Rome*
- 11:10 AM **Senatore, Luca, Michela Cigola, Arturo Gallozzi**, *New Methodologies for Knowledge and Valorization: The Digital Survey Made by Remote-Controlled Mobile Platform: The Case Study of the Roman Casinum City*

11:30 AM

Caldarone, Adriana, *3D Printing and Augmented Reality: Integration, Methods and Communication for Cultural Heritage*.

11:50 AM

Bercigli, Monica, Stefano Bertocci, *Digital Documentation of Masada Fortress in Israel: Integrated Methodologies of Survey and Representation*

12:10 PM

Carnevali, Laura, Marco Carpiceci, Andrea Angelini, *Problems Concerning Elaboration and Representation in Italian Rock-Hewn Architecture*

TUESDAY AFTERNOON

Digital Archaeology - Where are We and How do We Fit In? / SIG Education and Outreach

Critical Reflections **Room: SCE 216**

Organizers: Paul Reilly, John Pouncett, Stephen Stead

- 12:45 PM **Brin, Adam, Francis Pierce-McManamon, Leigh Anne Ellison**, *The Archaeological Data Lifecycle*
- 1:05 PM **Verhagen, Philip**, *Education, Training, and Outreach: A Call to Arms*

Archaeology In and Out of the Classroom: Digital Approaches to Archaeological Instruction

Education and Dissemination **Room: SCE 216**

Organizer: Jeffrey Emanuel

- 2:00 PM **Gandolfi, Eleonora**, *Public Engagement in Compulsory-Age Education with MOOCs: A Case Study from the Italian and English Context*
- 2:20 PM **Rourk, Will, Andrew Johnston, Lauren Massari, Shayne Brandon, Arin Bennett, Jama Courtney, Worthy Martin**, *Cultural Heritage Data Synthesis for Architectural History Field*
- Methods*
- 2:40 PM **Golubiewski-Davis, Kristina, Samantha Porter, Matt Edling, John Soderberg, Gilbert Tostevin**, *The Use and Reuse of 3D Scanned Lithic Refits*
- 3:00 PM **Calvin, Elizabeth, Jennifer Wexler**, *Virtual Viewing: Engaging Audiences with the African Rock Art Digital Collection at The British Museum*

Ground-penetrating Radar Advancements in the Americas

Geophysics/Remote Sensing **Room: SCE 217**

Organizer: Peter Leach

- 2:00 PM **Morris, Isabel**, *Today's Surveys and Tomorrow's Inversions: GPR Attribute Analysis*
- 2:20 PM **Sturm, Jennie**, *Ground-Penetrating Radar in Chaco Canyon, New Mexico: 40 Years of Mapping Chaco's Buried Past*
- 2:40 PM **Lowry, Sarah, Shawn Patch**, *Mississippian Villages in East Tennessee: Geophysical Case Studies at Five Sites to Examine Community Layout and Land Use*
- 3:00 PM **Leach, Peter, Richard Boisvert**, *High-Frequency GPR for Real-Time 'Digital Bisection' of Archaeological Features*

Urbanism at the Micro, Meso and Macro Scales: Advances in Computational and Quantitative Methods to Study Cities and their Built Environments

GIS **Room: SCE Auditorium**

Organizers: Eleftheria Paliou, Adrian Chase

- 2:00 PM **Chase, Adrian**, *Erasing the Garden City: Interpolation of Architectural Volume from LiDAR Derived DEMs*
- 2:20 PM **Prufer, Keith, Amy Thompson**, *Processes of Urban Development Among the Ancient Maya of Uxbenká and Ix Kuku'il, Southern Belize*
- 2:40 PM **Hare, Timothy**, *Mapping and 3D Modeling at the Household, Neighborhood, and Regional Levels Using UAVs, Photogrammetry, and LiDAR*
- 3:00 PM **Forte, Maurizio, Nevio Danelon, David Johnston, Katherine McCusker, Everett Newton**, *Vulci3000 Project - A Digital Challenge*
- 3:20 PM **Landeschi, Giacomo, Stefan Lindgren, Jesper Blid Kullberg, Henrik Gerding, Alcestis Papadimitriou, Jenny Wallensten, Nicolò Dell'Unto, Angeliki Kossiva**, *Integrated Digital Methods for Investigating a Hidden Cityscape: The Case of Ancient Hermion*
- 3:40 PM *Coffee Break*
- 4:00 PM **Kubicka, Anna**, *The Metrological Research of Machu Picchu Settlement: Application of a Cosine Quantogram Method for 3D*
- Laser Data*
- 4:20 PM **Vadala, Jeffrey, Brian Denham**, *Virtual Reality as a Tool for Spatial Analysis at Cerro Maya, Belize (Cerro)*
- 4:40 PM **Goodwin, Graham, Heather Richards-Rissetto**, *Modeling Acoustics in Ancient Maya Cities: Moving Towards a Synesthetic Experience Using 3D Simulation*
- 5:00 PM **Hanus, Kasper**, *Understanding Urban Pattern of Silk Road Oasis-Cities Using Archival Aerial Images.*
- 5:20 PM *Discussion*

The Creation of Big Data Labs for Archaeology, Heritage, and Global Initiatives

Broader View - Digital Archaeology and the Humanities **Room: SCW 460/462**

Organizers: Thomas Levy, Michael Decker

- 2:00 PM **Johnson, Andrew, Steve Savage, Tom Levy**, *The ASOR Cultural Heritage Initiative-TerraWatchers Collaborative: Crowd-Sourced Monitoring of At Risk Cultural Heritage Sites in the Middle East*
- 2:20 PM **Banaszek, Łukasz, Kamila Oleś**, *Making Use of the Publicly Available Spatial Data and Bringing the Past to the People: A Case Study of the Pomeranian Wall, Poland*

2:40 PM	McCusker, Katherine, Maurizio Forte, David Johnston, Everette Newton , <i>Adding the Aerial Multi-Spectral Perspective: A Holistic View of Vulci through Multi-layered Data Sets</i>
3:00 PM	Harrison, Laura , <i>Mobilizing a Salvage Archaeology Dataset to Build a 3D Interpretive Visualization</i>
3:20 PM	Smitheram, Craig, George Pavlidis, Thomas Levy , <i>The Center for Cyber-Archaeology and Sustainability (CCAS): Pedagogy and Student Engagement in At-Risk World Heritage Initiatives</i>
3:40 PM	<i>Coffee Break</i>
4:00 PM	Lercari, Nicola, Jeffrey Weekley , <i>Leveraging the UC Merced WAVE and Pacific Research Platform to Create At-Risk Global</i>
<i>Cultural Heritage Networks</i>	
4:20 PM	Frey, Jon , <i>From Analog to Digital in Archaeological Archives</i>
4:40 PM	Spring, Adam , <i>Solutions in Photogrammetric Selectivity: Optimizing High Fidelity Meshes from Casual Photography-The</i>
<i>Trajan's Forum Project Examples</i>	
5:00 PM	Forte, Maurizio, Nevio Danelon, Julia Liu , <i>The Trajan's Forum Project: Dig@lab and the Framework of Big Data.</i>
5:20 PM	Liss, Brady, Matthew Howland, Thomas Levy , <i>Running on Autopilot: Testing Google Earth Engine for the Automatic Identification of Archaeological Features in Satellite Imagery</i>

Methods, Tools, Disruption ... : From Information Delivery to Interaction

Broader View - Digital Archaeology and the Humanities Room: SCW 464

Organizer: Ian Johnson

2:00 PM	Gunn, Scott , <i>Archaeological Field Data Collection Using Ruggedized Android Tablets and Free and Open Source Software</i>
2:10 PM	Brennan, Matthew, Bernard Frischer , <i>Photomodeling for Rapid Documentation and Survey of Complex Urban Spaces and Archaeology</i>
2:20 PM	Laugier, Elise, Jesse Casana , <i>Cultural Heritage Monitoring Using Time-Sequenced Satellite Imagery: A Case Study from the Syrian Civil War</i>
2:30 PM	Casana, Jesse, Jackson Cothren , <i>The CORONA Atlas Project: Orthorectification and Analysis of Declassified, Cold War-Era Satellite Imagery</i>
2:40 PM	Meyer, Dominique, Eric Lo, Thomas Wypych, Dominique Rissolo, Falko Kuester , <i>From Air to Model- A Workflow for Automated UAV Surveying, Data Transmission and Rapid Cloud</i>
<i>Distributed Photogrammetry Processing</i>	
2:50 PM	Tolle, Karsten, David Wigg-Wolf , <i>Improving Data Quality by Rules – A Numismatic example</i>
3:00 PM	<i>Discussion</i>

Rip – Model – Learn: Towards the Total Model

Broader View - Digital Archaeology and the Humanities Room: SCW 466/468

Organizers: Carlo Bianchini, Alfonso Ippolito, Carlo Inglese, Luca Senatore

2:00 PM	Mancini, Matteo Flavio, Leonardo Baglioni , <i>Integrated Surveying Techniques for Analysis of Archaeological Artifact</i>
2:20 PM	Gallozzi, Arturo, Leonardo Paris, Wissam Wahbeh , <i>3D Models and Interactive Communication for Archaeology: The Nymphaeum Ponari in Cassino</i>
2:40 PM	Carpiceci, Marco, Carlo Inglese, Andrea Angelini , <i>Survey, Representation, Analysis and Cataloguing of the Rock-Hewn Architecture in Cappadocia</i>
3:00 PM	Chiavoni, Emanuela, Daniela Esposito , <i>The Archaeological Park of the Porto of Traian: Knowledge, Preservation and Fruition</i>
3:20 PM	Piumatti, Paolo, Rosa Tamborrino , <i>3D Digital Modelling and Digital Urban History: A Methodology for Studying the Processes of Transformation of Nubian Temples and Landscape in the Site of Lake Nasser.</i>
3:40 PM	<i>Coffee Break</i>
4:00 PM	Pirinu, Andrea , <i>Graphic Analysis of Historic Documents, Architectural Survey, Applied Geophysics in Support of</i>
<i>Archaeological Investigation: The Urban Wall of Cagliari (Sardinia, Italy)</i>	
4:20 PM	Attenni, Martina, Alfonso Ippolito , <i>Representing Intangible Heritage: Questions About Method</i>
4:40 PM	Inglese, Carlo, Carlo Bianchini, Alfonso Ippolito, Martina Attenni, Valeria Caniglia , <i>Tradition and Innovation: From</i>
<i>Worksite Plans to Digital Models</i>	
5:00 PM	Porfiri, Francesca, Carlo Bianchini , <i>The Microcosm of Tiberius's Cave in Sperlonga: Analysis, Investigation and Digital Reconstruction of the Ancient "Sculpture's Theatre"</i>
5:20 PM	Bianchini, Carlo, Alessandro Viscogliosi, giorgia potestà, Gaia Lisa Tacchi , <i>Tradition and Hi-Tech in the Construction of a Total Model: The Complex of Pietrabbondante</i>

The Technology Lag: A Panel Discussion Regarding the Use of the Computing Technologies Toolkit For Cultural Resource Compliance Projects

Critical Reflections Room: SCE 216

Organizers: Brian Seymour, Michael Scafuri, Sarah Kessick, Timothy Dodson

4:00 PM	Seymour, Brian , <i>Introduction / Roundtable</i>
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Non Invasive Methods to Assess Above and Underground Spatial Pattern

Geophysics/Remote Sensing Room: SCE 217

Organizers: Michael Märker, Christian Sommer

4:00 PM	Märker, Michael, Ivano Rellini, Luigi Mucerino, Volker Hochschild, <i>Assessment of Subsurface Neolithic/ Palaeolithic Sites in the Southern Gargano Area, Apulia, Italy</i>
4:20 PM	Stavilă, Andrei, <i>Bronze Age Tell or Not? Research Methods for Revealing the Internal Habitation Pattern of Alioș – „Valea Alioșu” Site, Timiș County, Romania</i>
4:40 PM	Pihokker, Matthew, <i>Determining Spatial Relationships between Domestic Sites and Cemeteries of the Central Peloponnese</i>
5:00 PM	Hegy, Alexandru, Petru Urdea, <i>2D and 3D Electrical Resistivity Tomography Imaging of Archaeological Structures - Case Studies from Romania</i>

Geographic Relations in Databases on Cultural Heritage

Networks/Modeling

Room: SCW 464

Organizers: Michael Märker, Volker Hochschild, Espen Uleberg, Mieko Matsumoto

4:00 PM	Perucchetti, Laura, Peter Bray, Mark Pollard, <i>The Use of GIS to Understand the Circulation of Metal in the Prehistoric Alps.</i>
4:20 PM	Uleberg, Espen, Mieko Matsumoto, <i>Display matters? Enhanced Visualization for Unique Aspects of Norwegian Stone Age Site Distribution</i>
4:40 PM	Willmes, Christian, Daniel Becker, Yasa Yener, Olaf Bubenzer, Georg Bareth, <i>Open Science, e-Science and Geospatial Data Management to Support Research in Archaeology</i>
5:00 PM	Märker, Michael, Volker Hochschild, Christian Sommer, <i>How to Integrate and Illustrate Aspects of Landscape Evolution and Human Evolution</i>
5:20 PM	<i>Discussion</i>