

SAROI Second Workshop: Final Schedule

Dates: June 27th-July 1st 2022

Location: Center for Advanced Spatial Technologies, University of Arkansas,
Fayetteville, Arkansas

Day 1 (M)		Staffing	Description
7:00-8:30	Breakfast at campus dining		
9:00 – 10:00	Welcome and Introduction	Limp and Klehm	The overall structure for the workshop will be presented along with class mechanics. The challenges of publication with extensive digital content will be covered along with strategies for digital archiving. Finally there will be a discussion of developing future proposals.
10:00- 11:45	Fellows project review	Fellows and staff	Fellows will review their progress to date on their projects, lessons learned and anticipated tasks going forward.
11:45 – 1:00	Lunch		
1:00 – 2:30	Data Integration and Analytics	Wyatt	
2:30-3:30	HDSM protocols and thoughtful data management plans	Klehm	Review of protocols for HDSM methods to ensure successful data visualization, publication, and archiving, including FAIR principles, data reuse,
3:30-4:30	Data Preparation Demos	Williamson, Payne, and Green	Demonstration on data preparation, assembly, and modeling for meshes and point clouds (e.g., in Cloud Compare, LAS Tools).
5:00-7:00	Happy Hour		Location TBD
Recommended Readings	DigVentures, on behalf of Historic England. “Work Digital/Think Archive: A Guide to Managing Digital Data Generated from Archaeological Investigations.” https://www.dropbox.com/s/e8ap9hkb710ucfe/7796DIG18WorkDigitalThinkArchive-FINAL-v2-0.pdf?dl=0 . (2019). Accessed 26 Feb 2020. Kansa, E., & Kansa, S. (2021). Digital Data and Data Literacy in Archaeology Now and in the New Decade. <i>Advances in Archaeological Practice</i> , 9(1), 81-85.		
Day 2 (Tu)		Staffing	Description
7:00-8:30	Breakfast at campus dining		
9:00 – 11:45	Introduction to Tools and Techniques for Visualization	Payne and Klehm	Staff will discuss the challenges of digitally presenting 3D data and methods for visualization. Strategies to represent/visualize complex high-density datasets will be reviewed. Concepts covered will include post-project organization, data reduction, and begin discussion of archival

			strategies. Demonstrations include Cloud Compare for basic rendering and animation, ArcGIS Pro for point cloud import, Unreal for point cloud import and animation. MeshLab, Blender, and Sketchfab will also be covered.
12:00 – 1:00	Lunch		
1:00 – 4:30	Meet with mentors		Meet with individual mentors to address specific project issues with digital archiving and publication.
Recommended Readings	GitHub - castuofa/sparc teaching Mickleburgh, Hayley L., Stutz, Liv Nilsson and Fokkens, Harry. "Virtual Archaeology of Death and Burial: A Procedure for Integrating 3D Visualization and Analysis in Archaeoethanatology" Open Archaeology, vol. 7, no. 1, 2021, pp. 540-555. https://doi.org/10.1515/opar-2020-0152		
Day 3 (W)			
7:00-8:30	Breakfast at campus dining		
9:00 – 11:45	Continued visualization and publication software demonstrations; post-product organization and metadata standards	Williamson and Payne	Continued software demonstrations on online viewing and publication platforms, including Potree, 3D Heritage Online Platform, Relief Visualization Toolbox, ArcGIS Online, and ESRI Storymaps. Software agnostic file types, presentation, and distribution methods will be discussed.
11:45 – 1:00	Lunch		
1:00 – 4:30	Mentor Time		Meet with individual mentors to address specific project issues with digital archiving and publication.
Recommended Readings	VR Software wiki (brown.edu) Howland, M., Liss, B., Levy, T., & Najjar, M. (2020). Integrating Digital Datasets into Public Engagement through ArcGIS StoryMaps. <i>Advances in Archaeological Practice</i> , 8(4), 351-360. doi:10.1017/aap.2020.14		
Day 4 (Th)			
7:00-8:30	Breakfast at campus dining		
9:00 – 11:45	Publication strategies and interrelation with archives	Klehm and Payne	Research publication is always challenging for those relatively new to the field. This is made even more complex when there are massive amounts of digital data. Staff will conduct a review of the state-of-the art in digital publications strategies, challenges and opportunities. Exemplars will be presented and critiqued. The challenge of maintaining archives and digital publications will be investigated and variable strategies to link archives and publications will be considered.
11:45 – 1:00	Lunch		

1:00 – 4:30	Cultural Activity		Fellows will choose from hiking (AM or PM), swimming hole, Crystal Bridges and/or The Momentary
Recommended Readings	<p>Optiz, R., Mogetta, M., and N. Terrenato (Eds.) A Mid-republic House from Gabii. E-book, Ann Arbor, 2016: University of Michigan Press. https://doi.org/10.3998/mpub.9231782.</p> <p>Banducci, Laura M, and Anna Gallone. A Cemetery and Quarry From Imperial Gabii. E-book, Ann Arbor, MI: University of Michigan Press, 2021, https://doi.org/10.3998/mpub.11885571</p> <p>Optiz, R., Richards-Rissetto, H., Dalziel, K., Dussault, J. and Tunink, G. (2022) Exploring 3D data reuse and repurposing through procedural modeling. In: Garstki, K. (ed.) Critical Archaeology in the Digital Age: Proceedings of the 12th IEMA Visiting Scholar Conference. UCLA Cotsen Institute of Archaeology Press, pp. 123-139. ISBN 9781950446261</p>		
Day 5 (F)		Staffing	Description
7:00-8:30	Breakfast at campus dining		
9:00 – 11:45	Archiving: data storage, metadata and repositories for future access and reuse	Klehm, J. Wilson, and Payne	Complexities and requirements of storing and archiving large, dense spatial datasets will be covered, including metadata strategies. Characteristics of major disciplinary archives (Open Context, tDAR, ADS) will be reviewed. Metadata standards and archiving and discovery will be covered. University and other, general, archives (e.g. Zenodo) will be demonstrated and strengths and weaknesses of the alternatives will be discussed as well. The significance of persistent document identifiers and the value of CoINS and similar vehicles to encourage citation and reuse. Using the workplan and guidance documents from the CiFA/Historic England Dig Ventures initiative as models, staff will review the steps in selecting a digital archive and the processes needed to prepare the digital materials created by the Fellows for archiving. Role of data management plan in future proposals and elements to be considered in formulating such plans will be covered as will costing and budgeting.
11:45 – 1:00	Lunch		
1:00 – 2:00	Mentor Time		
2:00-4:00	Mentor Time		Continue hands-on work with staff and equipment, software and materials
4:00-6:30	Reception		Final Reception at the Duncan Ave Apartments
Recommended Readings	https://guides.archaeologydataservice.ac.uk/g2gp/Main		

Mi, X., Bernardy, R. & Schmidt, L. Building an archaeological data repository: a digital library and digital humanities collaboration at the University of South Florida. *Int J Digit Libr* 22, 135–145 (2021). <https://doi.org/10.1007/s00799-020-00297-1>

Aycock, J. (2021). The coming tsunami of digital artefacts. *Antiquity*, 95(384), 1584-1589. doi:10.15184/aqy.2021.84