ODU CS Department
Norfolk, VA 23529
+1 757 570 7376
+1 757 683 6393
FAX +1 757 683 4900
mln@cs.odu.edu
phonedude_mln
phonedude
www.cs.odu.edu/~mln/

Michael L. Nelson

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Career Highlights

Founder & Co-Director:	Web Science & Digital Library (WSDL) Research Group, home page: `oduwsdl.github.io`, blog: `ws-dl.blogspot.com`, GitHub: `github.com/oduwsdl`, Twitter: `twitter.com/WebSciDL`
PhD Students:	15 graduated, 8 current (advising and co-advising)
Grants:	33 Grants (PI on 21), $10.2M in total funding, including an NSF CAREER award
Publications:	280+ publications, 8400+ citations, h=38, `scholar.google.com/citations?user=oWQaPnwAAAAJ`
Protocols:	Co-editor of six popular protocols: Robust Links, cite-as (Internet RFC 8574), Memento (Internet RFC 7089), ResourceSync (ANSI/NISO Z39.99-2014), OAI-ORE, and OAI-PMH
Awards:	5 best paper awards (+5 nominations), 4 best poster awards, Digital Preservation Award (2010), NSF CAREER Award (2007)
Popular Media:	CNN, The New Yorker, The Atlantic, The Washington Post, MIT Technology Review, The Chronicle of Higher Education, WHRO, BBC, Der Spiegel, The Virginian Pilot, Vice, Vox, and many others

Professional Preparation

2000–2001	**Postdoctoral**, *University of North Carolina, School of Information and Library Science*, Chapel Hill, NC, Advisor: Gary Marchionini.
2000	**Ph.D. Computer Science**, *Old Dominion University*, Norfolk, VA, Advisor: Kurt Maly. Dissertation Title: *Buckets: Smart Objects for Digital Libraries*
1997	**M.S. Computer Science**, *Old Dominion University*, Norfolk, VA.
1991	**B.S. Computer Science**, *Virginia Tech*, Blacksburg, VA.

Appointments

2022–present	**Interim Director**, *School of Data Science, Old Dominion University*, Norfolk, VA.
2018–present	**Professor**, *Virginia Modeling, Analysis and Simulation Center (joint appointment)*, Suffolk, VA.
2015–present	**Professor**, *Old Dominion University*, Norfolk, VA.
2008–2015	**Associate Professor**, *Old Dominion University*, Norfolk, VA.
2002–2008	**Assistant Professor**, *Old Dominion University*, Norfolk, VA.
1991–2002	**Computer Engineer**, *NASA Langley Research Center*, Hampton, VA.
2002	**Consultant**, *Institute for Computer Applications in Science and Engineering (ICASE)*, Hampton, VA.
2000	**Summer Visiting Researcher**, *Air Force Research Laboratory*, Albuquerque, NM.
1999	**Summer Visiting Researcher**, *Air Force Research Laboratory*, Albuquerque, NM.
1995–1996	**Principal**, *Unified Research Laboratories*, Hampton, VA.
1991	**Systems Programmer**, *Computer Sciences Corporation*, Hampton, VA.

Awards and Recognition

2021	**Best Paper Award**, *TPDL 2021*.
2019	**2X Best Student Paper Finalist (Alexander Nwala; Sawood Alexander)**, *ACM/IEEE JCDL 2019*.
2018	**ODU College of Science Distinguished Research Award**.
2018	**Best Poster**, *ACM/IEEE JCDL 2018*.
2018	**Vannevar Bush Best Paper Finalist**, *ACM/IEEE JCDL 2018*.
2017	**Best Poster**, *ACM/IEEE JCDL 2017*.
2015	**Best Student Paper Award (Lulwah Alkwai)**, *ACM/IEEE JCDL 2015*.
2015	**Best Poster**, *ACM/IEEE JCDL 2015*.

2014 **Vannevar Bush Best Paper Award**, *ACM/IEEE JCDL 2014*.

2014 **Best Student Paper Award (Justin Brunelle)**, *ACM/IEEE JCDL 2014*.

2013 **Best Student Paper Award (Yasmin AlNoamany)**, *TPDL 2013*.

2013 **Best Student Paper Finalist (Scott Ainsworth)**, *ACM/IEEE JCDL 2013*.

2012 **ODU College of Science Distinguished Research Award**.

2012 **ODU College of Science Doctoral Mentoring Award**.

2010 **Digital Preservation Coalition (DPC) Digital Preservation Award**, *For Work on Memento*, London UK, December 1 2010.

2010 **Microsoft Research Faculty Summit 2010**, *For Work on Memento*, Redmond WA, July 12-13 2010.

2010 **O'Reilly Foo Camp**, *For Work on Memento*, Sebastopol CA, June 24-28 2010.

2008 **Digital Preservation Pioneer**, *Library of Congress*.

2007–2011 **NSF CAREER Award**, *Self-Preserving Digital Objects*.

2007 **Invited Participant**, *NSF/JISC Repositories Workshop*, April 17-19, 2007, Phoenix AZ.

2004 **Best Poster**, *ACM/IEEE JCDL 2004*.

2003 **Vannevar Bush Best Paper Finalist**, *ACM/IEEE JCDL 2003*.

2001 **Award for the NACA digital library**, *NASA Langley Research Center*.

2000–2001 **Information Technology Fellowship**, *NASA Langley Research Center*.

2000 **Award for Research Excellence**, *NASA Langley Research Center*.

1996 **Best Technical Site for the NASA Technical Report Server**, *Industry.Net*.

1994 **Team Excellence Award for Internet Fair 1**, *NASA Langley Research Center*.

1993 **Award for the Langley Technical Report Server**, *NASA Langley Research Center*.

Grants ($13.5M total, PI on 23 of 39)

2022–2023 M. Kelly (PI), M. C. Weigle, M. L. Nelson, M. Crain, "Saving Ads: Assessing and Improving Web Archives' Holdings of Online Advertisements", IMLS, $149,479

2022–2024 E. Frydenlund (PI), J. Padilla (Co-PI) et al., "What's Missing? Innovating Interdisciplinary Methods for Hard-to-Reach Environments", DoD, $1,700,245

2022–2025 S. Jayarathna (PI), J. Wu (Co-PI) et al., "REU Site: Research Experiences for Undergraduates in Disinformation Detection and Analytics", NSF, $324,000

2022–2024 J. Johnson (PI) et al., "Graduate Research Opportunities and Workforce Readiness in Modeling and Simulation (GROW M&S)", Dept of Education, $1,151,446

2022–2022 M. Nelson (PI), M. Weigle (Co-PI), J. Wu (Co-PI), "Web Science and Web Security", CCI, $10,000

2022–2022 M. L. Nelson (PI), M. Weigle, "Game Walkthroughs and Web Archiving", IIPC, $10,000

2021–2023 V. Rampin (PI), M. Klein (Co-PI), wilkie (Co-PI), M. L. Nelson (Co-PI), "Collaborative Software Archiving for Institutions (CoSAI)", Alfred P. Sloan Foundation, $520,503

2021-2023 M. L. Nelson (PI), M. C. Weigle, S. Kimmel, J. Ritchie, W. Hu, "A Graduate Certificate in Web Archiving", IMLS, $98,361

2021-2022 M. L. Nelson (PI), Not Your Parents' Web: Scope, Segmentation, Stability, Resilience, and Persistence, Protocol Labs, $75,000

2020–2021 M. L. Nelson (PI), M. Weigle, et al. "Improving the Dark and Stormy Archives Framework by Summarizing the Collections of the National Library of Australia", IIPC, $50,000

2020–2020 D. E. Wittkower (PI), L. Wittkower, M. L. Nelson, "Information Literacy for Cybersecurity", COVA CCI, $20,000

2018–2020 Z. Xie (PI), E. Fox, M. Klein, M. L. Nelson, J. Littman, J. Bailey, I. Milligan, "Continuing Education to Advance Web Archiving", IMLS, $248,451

2017–2019 M. C. Weigle (PI), M. L. Nelson, "Visualizing Webpage Changes Over Time", NEH, $75,000

2016–2019 M. L. Nelson (PI), M. C. Weigle, H. Van de Sompel,"Towards a Web-Centric Approach for Capturing the Scholarly Record", Andrew Mellon Foundation, $830,000

2015–2018 M. L. Nelson (PI), M. C. Weigle, "Increasing the Value of Existing Web Archives", NSF, $481,780

2015–2018 M. L. Nelson (PI), M. C. Weigle, "Combining Social Media Storytelling With Web Archives", IMLS, $468,618

2014–2017 M. C. Weigle (PI), M. L. Nelson, "Archive What I Can See Now: Bringing Institutional Web Archiving Tools to the Individual Researcher", NEH, $324,624

2014–2016 M. L. Nelson, "Web Archive Profiling Via Sampling", IIPC, $49,000

2014 M. L. Nelson (PI), M. C. Weigle, "Tools for Managing Seed URIs", Andrew Mellon Foundation, $22,000

2014 M. C. Weigle (PI), M. L. Nelson, "Visualizing Digital Collections of Web Archives", Andrew Mellon Foundation, $22,000

2013–2014 M. C. Weigle (PI), M. L. Nelson, "Archive What I Can See Now", NEH, $57,892

2013–2014 M. L. Nelson, "Enhanced Memento Support for MediaWiki", Andrew Mellon Foundation, $25,000

2012–2013 M. L. Nelson, "Doctoral Consortium at 2012 ACM/IEEE-CS Joint Conference on Digital Libraries (JCDL 2012)", NSF, $15,930

2012–2013 T. A. Carpenter (PI), M. L. Nelson, C. Lagoze, "A Specification for Resource Synchronization", Alfred P. Sloan Foundation, $222,706

2011 M. L. Nelson (PI), M. C. Weigle, K. Gossett, L. Potts, "Identifying and Archiving Culturally Important Conversations in the Social Web", ODU Research Foundation, $54,000

2010–2013 H. Garcia-Molina (PI), M. L. Nelson, F. McCown, "III: Large: Collaborative Research: Web Archive Cooperative", NSF, $2,858,601

2010–2012 M. L. Nelson (PI), H. Van de Sompel, "Integrating the Past Web Into the Current Web", Library of Congress, $1,000,000

2008 M. L. Nelson, "Client-Side Preservation Techniques for ORE Aggregations", Andrew Mellon Foundation, $24,500

2007–2011 M. L. Nelson, "CAREER: Self-Preserving Digital Objects", NSF, $540,754

2007–2010 M. L. Nelson (PI), H. Van de Sompel, "Tools for a Preservation-Ready Web", Library of Congress, $249,941

2006–2007 M. L. Nelson, "SGER: In Vivo Digital Preservation", NSF, $101,895

2006 M. L. Nelson, "Repository Design and Support for the Library of Congress", Library of Congress, $16,156

2005–2006 M. L. Nelson, "OAI-PMH Repository Analysis for the NASA Langley Research Center Atmospheric Sciences Data Center", NASA LaRC, $50,892

2005–2006 M. L. Nelson (PI), J. Bollen, "Shared Infrastructure Preservation Models", NSF, $111,300

2004–2005 M. L. Nelson (PI), J. Bollen, "Self-Preserving Digital Objects", Library of Congress, $109,836

2004–2005 M. L. Nelson, "mod_oai: Getting OAI for Free", Andrew Mellon Foundation, $47,433

2003–2004 K. Maly (PI), M. Zubair, M. L. Nelson, J. Bollen, "Digital Library Technology/Application Development", NASA LaRC, $240,000

2002–2004 K. Maly (PI), M. Zubair, M. L. Nelson, "Kepler – A Communal Digital Library", NSF, $700,000

2001–2002 K. Maly (PI), M. Zubair, M. L. Nelson, "An OAI-Compliant Federated Physics Digital Library for the NSDL", NSF, $479,997

Protocols and Specifications

[1] Martin Klein, Shawn M. Jones, Harihar Shankar, Richard Wincewicz, Michael L. Nelson, and Herbert Van de Sompel. Robustifying links. https://robustlinks.mementoweb.org/spec/, 2020.

[2] Herbert Van de Sompel, Michael Nelson, Geoff Bilder, John Kunze, and Simeon Warner. cite-as: A Link Relation to Convey a Preferred URI for Referencing, Internet RFC 8574, April 2019.

[3] Martin Klein, Robert Sanderson, Robert Van de Sompel, Herbert, Simeon Warner, Bernhard Haslhofer, Michael Nelson, and Carl Lagoze. ResourceSync Framework Specification (ANSI/NISO Z39.99-2014). http://www.openarchives.org/rs/resourcesync, 2014.

[4] Herbert Van de Sompel, Michael Nelson, and Robert Sanderson. HTTP framework for time-based access to resource states – Memento, Internet RFC 7089, December 2013.

[5] Carl Lagoze, Herbert Van de Sompel, Pete Johnston, Michael Nelson, Robert Sanderson, and Simeon Warner. ORE Specifications and User Guides. http://www.openarchives.org/ore/toc, 2008.

[6] Carl Lagoze, Herbert Van de Sompel, Michael L. Nelson, and Simeon Warner. The Open Archives Initiative Protocol for Metadata Harvesting. http://www.openarchives.org/OAI/openarchivesprotocol.html, 2002.

Proceedings Edited

[1] José Borbinha, Michael L. Nelson, and Steve Knight, editors. *Proceedings of the 10th International Conference on Preservation of Digital Objects iPRES 2013, Lisbon, Portugal, September 3-5, 2013*, 2013.

[2] Karim B. Boughida, Barrie Howard, Michael L. Nelson, Herbert Van de Sompel, and Ingeborg Sølvberg, editors. *Proceedings of the 12th ACM/IEEE-CS Joint Conference on Digital Libraries, JCDL '12, Washington, DC, USA, June 10-14, 2012*. ACM, 2012.

[3] Gary Marchionini, Michael L. Nelson, and Catherine C. Marshall, editors. *ACM/IEEE Joint Conference on Digital Libraries, JCDL 2006, Chapel Hill, NC, USA, June 11-15, 2006, Proceedings*. ACM, 2006.

[4] Michael L. Nelson, Kurt Maly, Mohammad Zubair, and Diann Rucsh-Feja, editors. *Experimental OAI-Based Digital Library Systems, Workshop at the 2001 European Conference on Digial Libraries (ECDL), Darmstadt Germany, September 8, 2001*. NASA (NASA/TM-2002-211638), 2002.

Book Chapters

[1] Shawn M. Jones, Martin Klein, Herbert Van de Sompel, Michael L. Nelson, and Michele C. Weigle. Interoperability for accessing versions of web resources with the Memento protocol. In *The Past Web: Exploring Web Archives*. Springer International Publishing, 2021.

[2] Michael L. Nelson and Herbert Van de Sompel. Adding the dimension of time to HTTP. In *SAGE Handbook of Web History*. SAGE Publishing, 2019.

[3] Michael L. Nelson. Information loss. In *Decadence and Decay: From Ancient Rome to the Present*, pages 193–198. Bokförlaget Stolpe, 2019.

[4] Michael L. Nelson, Carl Lagoze, Herbert Van de Sompel, Pete Johnston, Robert Sanderson, and Simeon Warner. Object Reuse and Exchange. In *Wireless Communication and Information – Radio Engineering and Multimedia Applications*, pages 259–265. Verlag Werner Hulsbusch, 2009.

[5] Martin Klein, Frank McCown, Joan A. Smith, and Michael L. Nelson. How much preservation do I get if I do absolutely nothing? Using the Web Infrastructure for digital preservation. In *Content Engineering: Konzepte, Technologien und Anwendungen in der Medienproduktion*, pages 71–87. Gito Verlag, 2007.

[6] Frank McCown, Joan A. Smith, Michael L. Nelson, and Johan Bollen. Reconstructing websites for the lazy webmaster. In *Dynamics of Search Engines: An Introduction*, pages 81–112. The Icfai University Press, 2007.

[7] Gretchen L. Gottlich, John M. Meyer, Michael L. Nelson, and David J. Bianco. Integrating information technology into large organizations. In *Cases in Information Technology Management in Modern Organizations*, pages 210–225. Idea Group Inc., 1997.

Refereed Journals

[1] Mohamed Aturban, Martin Klein, Herbert Van de Sompel, Michael L. Nelson, and Michele C. Weigle. Hashes are not suitable to verify fixity of the public archived web. *Submitted for Publication*, 2023.

[2] Himarsha R. Jayanetti, Kritika Garg, Michele C. Weigle, and Michael L. Nelson. Robots still outnumber humans in Web archives in 2019, but less than in 2015 and 2012. *Submitted for Publication*, 2023.

[3] Sawood Alam, Michele C. Weigle, and Michael L. Nelson. Profiling web archival voids using access logs for Memento routing. *Submitted for Publication*, 2023.

[4] Shawn M. Jones, Martin Klein, Michele C. Weigle, and Michael L. Nelson. Shining a light into dark and stormy archives through social media storytelling. *Submitted for Publication*, 2023.

[5] John Berlin, Mat Kelly, Michael L. Nelson, and Michele C. Weigle. To re-experience the Web: A framework for the transformation and replay of archived Web pages. *ACM Transactions on the Web (in press)*, 2023.

[6] Shawn M. Jones, Himarsha R. Jayanetti, Alex Osborne, Paul Koerbin, Martin Klein, Michele C. Weigle, and Michael L. Nelson. The DSA toolkit shines light into dark and stormy archives. *Code4Lib Journal*, 53, 2022.

[7] Corren G. McCoy, Michael L. Nelson, and Michele C. Weigle. Mining the web to approximate university rankings. *Information Discovery and Delivery*, 46(3):173–183, 2018.

[8] Shawn M. Jones, Herbert Van de Sompel, and Michael L. Nelson. Avoiding spoilers: wiki time travel with Sheldon Cooper. *International Journal on Digital Libraries*, 19(1):77–93, 2018.

[9] Lulwah Alkwai, Michael L. Nelson, and Michele C. Weigle. Comparing the archival rate of Arabic, English, Danish, and Korean language web pages. *ACM Transactions on Information Systems*, 36(1), 2017.

[10] Sawood Alam, Michael L. Nelson, Herbert Van de Sompel, Lyudmila L. Balakireva, Harihar Shankar, and David S. H. Rosenthal. Web archive profiling through CDX summarization. *International Journal on Digital Libraries*, 17(3):223–228, 2016.

[11] Yasmin AlNoamany, Michele C. Weigle, and Michael L. Nelson. Characteristics of social media stories: What makes a good story? *International Journal on Digital Libraries*, 17(3):239–256, 2016.

[12] Yasmin AlNoamany, Michele C. Weigle, and Michael L. Nelson. Detecting off-topic pages within TimeMaps in Web archives. *International Journal on Digital Libraries*, 17(3):203–221, 2016.

[13] Justin F. Brunelle, Mat Kelly, Hany SalahEldeen, Michele C. Weigle, and Michael L. Nelson. Not all mementos are created equal: measuring the impact of missing resources. *International Journal on Digital Libraries*, 16(3-4):283–301, 2015.

[14] Charles L. Cartledge and Michael L. Nelson. When should I make preservation copies of myself? - and after I do, how will I send messages to my copies? *International Journal on Digital Libraries*, 16(3-4):183–205, 2015.

[15] Justin F. Brunelle, Mat Kelly, Michele C. Weigle, and Michael L. Nelson. The impact of JavaScript on archivability. *International Journal on Digital Libraries*, 17(2):95–117, 2016.

[16] Scott G. Ainsworth and Michael L. Nelson. Evaluating sliding and sticky target policies by measuring temporal drift in acyclic walks through a web archive. *International Journal on Digital Libraries*, 16(2):129–144, 2015.

[17] Ahmed AlSum, Michele C. Weigle, Michael L. Nelson, and Herbert Van de Sompel. Profiling web archive coverage for top-level domain and content language. *International Journal on Digital Libraries*, 14(3):149–166, 2014.

[18] Yasmin AlNoamany, Ahmed AlSum, Michele C. Weigle, and Michael L. Nelson. Who and what links to the Internet Archive. *International Journal on Digital Libraries*, 14(3):101–115, 2014.

[19] Martin Klein and Michael L. Nelson. Moved but not gone: an evaluation of real-time methods for discovering replacement web pages. *International Journal on Digital Libraries*, 14(1-2):17–38, 2014.

[20] Carl Lagoze, Michael L. Nelson, Herbert Van de Sompel, Simeon Warner, Robert Sanderson, and Pete Johnston. A Web-Based Resource Model for Scholarship 2.0: Object Reuse & Exchange. *Concurrency and Computation: Practice and Experience*, 24(18):2221–2240, 2012.

[21] Frank McCown, Catherine C. Marshall, and Michael L. Nelson. Why websites are lost (and how they're sometimes found). *Communications of the ACM*, 52(11):141–145, 2009.

[22] Michael L. Nelson, Frank McCown, Joan A. Smith, and Martin Klein. Using the web infrastructure to preserve web pages. *International Journal on Digital Libraries*, 6(4):327–349, 2007.

[23] Johan Bollen, Michael L. Nelson, Gary Geisler, and Raquel Araujo. Usage derived recommendations for a video digital library. *Journal of Network and Computer Applications*, 30(3):1059–1083, 2007.

[24] Frank McCown, Xiaoming Liu, Michael L. Nelson, and Mohammad Zubair. Search engine coverage of the OAI-PMH corpus. *IEEE Internet Computing*, 10(2):66–73, 2006.

[25] Michael L. Nelson and Herbert Van de Sompel. IJDL special issue on complex digital objects: Guest editors' introduction. *International Journal on Digital Libraries*, 6(2):113–114, 2006.

[26] Xiaoming Liu, Johan Bollen, Michael L. Nelson, and Hebert Van de Sompel. Co-authorship networks in the digital library research community. *Information Processing and Management*, 41(6):1462–1480, 2005.

[27] Xiaoming Liu, Kurt Maly, Michael L. Nelson, and Mohammad Zubair. Lessons Learned with Arc, an OAI-PMH Service Provider. *Library Trends*, 53(4):590–603, 2005.

[28] Michael L. Nelson, JoAnne R. Calhoun, and Terry L. Harrison. OAI and NASA scientific and technical information. *Library Hi-Tech*, 21(2):140–150, 2003.

[29] Xiaoming Liu, Kurt Maly, Mohammad Zubair, Qiaoling Hong, Michael L. Nelson, Frances Knudson, and Irma Holtkamp. Federated Searching Interface Techniques for Heterogeneous OAI Repositories. *Journal of Digital Information*, 2(4), 2002.

[30] Michael L. Nelson and Kurt Maly. Buckets: smart objects for digital libraries. *Communications of the ACM*, 44(5):60–62, 2001.

[31] Michael L. Nelson. Buckets A new digital library technology for preserving NASA research. *Journal of Government Information*, 28(4):369–394, 2001.

[32] Michael L. Nelson. Better interoperability through the Open Archives Initiative. *New Review of Information Networking*, 7:133–146, 2001.

[33] Nancy R. Kaplan and Michael L. Nelson. Determining the publication impact of a digital library. *Journal of the American Society for Information Science*, 51(4):324–339, 2000.

[34] Michael L. Nelson and Kurt Maly. Preserving the pyramid of STI using buckets. *International Journal on Grey Literature*, 1(4):174–178, 2000.

[35] Sandra L. Esler and Michael L. Nelson. Evolution of scientific and technical information distribution. *Journal of the American Society for Information Science*, 49(1):82–91, 1998.

[36] Sandra L. Esler and Michael L. Nelson. NASA indexing benchmarks: evaluating text search engines. *Journal of Network and Computer Applications*, 20(4):339–353, 1997.

[37] Sandra L. Esler and Michael L. Nelson. TRSkit: A Simple Digital Library Toolkit. *Journal of Internet Cataloging*, 1(2):41–55, 1997.

[38] Michael L. Nelson and Ming-Hokng Maa. Optmizing the NASA Technical Report Server. *Internet Research: Electronic Network Applications and Policy*, 6(1):64–70, 1996.

[39] Michael L. Nelson, Gretchen L. Gottlich, David J. Bianco, Sharon S. Paulson, Robert L. Binkley, Yvonne D. Kellogg, Chris J. Beaumont, Robert B. Schmunk, Michael J. Kurtz, Alberto Accomazzi, and Omar Syed. The NASA technical report server. *Internet Research: Electronic Network Applications and Policy*, 5(2):25–36, 1995.

Refereed Conferences and Workshops

[1] Kriika Garg, Himarsha Jayanetti, Michele C. Weigle, and Michael L. Nelson. Caching HTTP 404 responses eliminates unnecessary archival replay requests. In *Proceedings of International Conference on Asian Digital Libraries (ICADL)*, pages 329–344, 2022.

[2] Travis Reid, Michael L. Nelson, and Michele C. Weigle. Web archiving as entertainment. In *Proceedings of International Conference on Asian Digital Libraries (ICADL)*, pages 401–411, 2022.

[3] Himarsha R. Jayanetti, Shawn M. Jones, Martin Klein, Alex Osbourne, Paul Koerbin, Michael L. Nelson, and Michele C. Weigle. Creating structure in web archives with collections: different concepts from web archivists. In *Proceedings of Theory and Practice of Digital Libraries (TPDL)*, pages 450–458, 2022.

[4] Abigail Mabe, Michael L. Nelson, and Michele C. Weigle. A Chromium-based Memento-aware Web browser. In *Proceedings of Theory and Practice of Digital Libraries (TPDL)*, pages 147–160, 2022.

[5] Himarsha R. Jayanetti, Kritika Garg, Sawood Alam, Michael L Nelson, and Michele C Weigle. Robots still outnumber humans in web archives, but less than before. In *Proceedings of Theory and Practice of Digital Libraries (TPDL)*, pages 245–259, 2022.

[6] Emily Escamilla, Martin Klein, Talya Cooper, Vicky Rampin, Michele C. Weigle, and Michael L. Nelson. The rise of GitHub in scholarly publications. In *Proceedings of Theory and Practice of Digital Libraries (TPDL)*, pages 187–200, 2022.

[7] Michael L. Nelson and Herbert Van de Sompel. Memento Validator: A toolset for Memento compliance testing. In *JCDL '22: Proceedings of the 22st ACM/IEEE-CS Joint Conference on Digital Libraries*, 2022.

[8] Bhanuka Mahanama, Lyudmila Balakireva, Sampath Jayarathna, Michael L. Nelson, and Martin Klein. Memento Validator: A toolset for Memento compliance testing. In *JCDL '22: Proceedings of the 22st ACM/IEEE-CS Joint Conference on Digital Libraries*, 2022.

[9] Mohamed Aturban, Michael L. Nelson, and Michele C. Weigle. Where did the Web archive go? In *Proceedings of Theory and Practice of Digital Libraries (TPDL)*, pages 73–84, 2021.

[10] Kriika Garg, Himarsha Jayanetti, Michele C. Weigle, and Michael L. Nelson. Replaying archived twitter: When your bird is broken, will it bring you down? In *JCDL '21: Proceedings of the 21st ACM/IEEE-CS Joint Conference on Digital Libraries*, 2021.

[11] Shawn M. Jones, Valentina Neblitt-Jones, Michele C. Weigle, Martin Klein, and Michael L. Nelson. It's all about the cards: Sharing on social media probably encouraged html metadata growth. In *JCDL '21: Proceedings of the 21st ACM/IEEE-CS Joint Conference on Digital Libraries*, 2021.

[12] Alexander Nwala, Michele C. Weigle, and Michael L. Nelson. Garbage, glitter, or gold: Assigning multi-dimensional quality scores to social media seeds for web archive collections. In *JCDL '21: Proceedings of the 21st ACM/IEEE-CS Joint Conference on Digital Libraries*, 2021.

[13] Sawood Alam, Michele C. Weigle, and Michael L. Nelson. Profiling web archival voids for Memento routing. In *JCDL '21: Proceedings of the 21st ACM/IEEE-CS Joint Conference on Digital Libraries*, 2021.

[14] Abigail Mabe, Michele Weigle, and Michael Nelson. Extending Chromium: Memento-aware browser. In *JCDL '21: Proceedings of the 21st ACM/IEEE-CS Joint Conference on Digital Libraries*, 2021.

[15] Dhruv Patel, Alexander C. Nwala, Michael L. Nelson, and Michele C. Weigle. What did it look like: A service for creating website timelapses using the memento framework. In *JCDL '21: Proceedings of the 21st ACM/IEEE-CS Joint Conference on Digital Libraries*, 2021.

[16] Shawn M. Jones, Michele C. Weigle, and Michael L. Nelson. Hypercane: Intelligent sampling for web archive collections. In *JCDL '21: Proceedings of the 21st ACM/IEEE-CS Joint Conference on Digital Libraries*, 2021.

[17] Shawn M. Jones, Michele C. Weigle, Martin Klein, and Michael L. Nelson. Automatically selecting striking images for social cards. In *Proceedings of the 13th ACM Conference on Web Science*, 2021.

[18] Yasith Jayawardana, Alexander C. Nwala, Gavindya Jayawardena, Jian Wu, Sampath Jayarathna, Michael L. Nelson, and C. Lee Giles. Modeling updates of scholarly webpages using archived data. In *Proceedings of 5th Computational Archival Science Workshop, IEEE Big Data*, 2020.

[19] Michele C. Weigle Lulwah M. Alkwai, Michael L. Nelson. Making recommendations from web archives for "lost" web pages. In *JCDL '20: Proceedings of the 20th ACM/IEEE-CS Joint Conference on Digital Libraries*, pages 87–96, 2020.

[20] Alexander C. Nwala, Michele C. Weigle, and Michael L. Nelson. 365 dots in 2019: Quantifying attention of news sources. In *Proceedings of Computation + Journalism Symposium 2020*, 2020.

[21] Shawn M. Jones, Michele C. Weigle, and Michael L. Nelson. Social cards probably provide for better understanding of web archive collections. In *Proceedings of the 28th ACM International Conference on Information and Knowledge Management, CIKM 2019*, 2019.

[22] Mohamed Aturban, Sawood Alam, Michele C. Weigle, and Michael L. Nelson. Archive assisted archival fixity verification framework. In *JCDL '19: Proceedings of the 19th ACM/IEEE-CS Joint Conference on Digital Libraries*, pages 162–171, 2019.

[23] Sawood Alam, Michele C. Weigle, Michael L. Nelson, Fernando Melo, Daniel Bicho, and Daniel Gomes. Mementomap framework for flexible and adaptive web archive profiling,. In *JCDL '19: Proceedings of the 19th ACM/IEEE-CS Joint Conference on Digital Libraries*, pages 172–181, 2019.

[24] Alexander C. Nwala, Michele C. Weigle, and Michael L. Nelson. Using micro-collections in social media to generate seeds for web archive collections. In *JCDL '19: Proceedings of the 19th ACM/IEEE-CS Joint Conference on Digital Libraries*, pages 251–260, 2019.

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Magazines, Reports, and Other Publications

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[5] Michael L. Nelson and Herbert Van de Sompel. A 25 year retrospective on D-Lib Magazine. Technical Report arXiv:2008.11680, 2020.

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[81] Joseph A. Kaplan and Michael L. Nelson. A comparison of queueing, cluster and distributed computing systems. Technical Report NASA TM-109025, NASA Langley Research Center, 1993.

Tutorials

2014-09-22 "Tools and Techniques for Revisiting Online Scholarly Content" (with Herbert Van de Sompel and Martin Klein and Richard Wincewicz), JCDL 2014 Tutorial, London UK

2013-09-22 "ResourceSync: The NISO/OAI Resource Synchronization Framework" (with Herbert Van de Sompel and Martin Klein and Robert Sanderson), TPDL 2013 Tutorial, Valetta Malta

2008-06-16 "Object Reuse and Exchange: The OAI-ORE Framework" (with Carl Lagoze, Herbert Van de Sompel and Simeon Warner), ACM/IEEE JCDL 2008 Tutorial, Pittsburgh PA

2006-06-(14-16) OAI-PMH Tutorial and Consultation, University of Southern California Libraries

2003-05-27 "Advanced Tutorial on Open Archives Initiative" (with Herbert Van de Sompel and Simeon Warner), ACM/IEEE JCDL 2003 Tutorial, Houston TX

2002-07-14 "Advanced Overview of Version 2.0 of the Open Archives Initiative Protocol for Metadata Harvesting" (with Herbert Van de Sompel and Simeon Warner), ACM/IEEE JCDL 2002 Tutorial, Portland OR

Selected Invited Presentations

2022-08-25 "Risks to Web Archives", Web Archiving / Ukraine Accountability, Starling Lab (online)

2022-08-22 "Trustworthy Web Archiving by 2025", National Archives and Records Administration (online)

2021-06-17 "Web Archiving in the Year eaee1902f186819154789ee22ca30035", Web Archiving Conference (online)

2021-03-30 "Uncertainty in replaying archived Twitter pages", Ethics and Archiving the Web: How to ethically collect and use web archives (online)

2020 Invited presentations at LANL, Indiana University, and DANS (the Netherlands) cancelled due to COVID-19

2020-03-09 "Web Archives at the Nexus of Good Fakes and Flawed Originals", Drexel CCI IS Department Distinguished Speaker Series, Philadelphia, PA

2019-10-15 "We can archive all of your social media, but should we?", ODU Science Pubs, Norfolk, VA

2019-04-09 "Web Archives at the Nexus of Good Fakes and Flawed Originals", CNI Spring 2019 Keynote, St. Louis, MO

2018-11-05 "Verifying Archived Web Pages – Blockchain Will Not Help Us", Symposium on Blockchain and Trusted Repositories, Chapel Hill, NC

2018-11-02 "Weaponized Web Archives: Provenance Laundering of Short Order Evidence", Va Tech CS Department Colloquium, Blacksburg, VA

2018-03-23 "Weaponized Web Archives: Provenance Laundering of Short Order Evidence", National Forum on Ethics and Archiving the Web, New York, NY

2017-02-21 "Web Archiving Activities of ODU's Web Science and Digital Library Research Group", Symposium on Web Archiving Interoperability, San Francisco, CA

2017-02-17 "The Memento Protocol and Research Issues With Web Archiving", ODU Chemistry Department Colloquium, Norfolk, VA

2017-02-21 "Web Archiving Activities of ODU's Web Science and Digital Library Research Group", Symposium on Web Archiving Interoperability, San Francisco, CA

2017-02-17 "The Memento Protocol and Research Issues With Web Archiving", ODU Chemistry Department Colloquium, Norfolk, VA

2017-02-16 "The Memento Protocol and Research Issues With Web Archiving", VCU CS Department Colloquium, Richmond, VA

2016-09-12 "The Memento Protocol and Research Issues With Web Archiving", UVA Library Colloquium, Charlottesville, VA

2016-08-22 "We Need Multiple, Independent Web Archives", Documenting the Now Advisory Board, St. Louis, MO

2016-04-11 "Combining Heritrix and PhantomJS for Better Crawling of Pages with Javascript", IIPC General Assembly, Reykjavik, Iceland

2016-04-05 "Storytelling for Summarizing Collections in Web Archives", CNI Spring 2016, San Antonio, TX

2016-04-03 "Why We Need Multiple Archives", Digital Preservation of Federal Information Summit CNI Spring 2016, San Antonio, TX

2015-11-13 "Combining Storytelling and Web Archives", ODU EE Department Colloquium, Norfolk, VA

2015-04-28 "Evaluating the Temporal Coherence of Archived Pages", IIPC General Assembly, Stanford, CA

2015-02-24 "Information Loss and Decay of the World Wide Web", The Declinism Seminars: Decay, Cambridge, MA

2014-07-23 "Assessing the Quality of Web Archives", Digital Preservation 2014, Washington DC

2013-09-06 "Who Will Archive the Archives? Thoughts About the Future of Web Archiving", Wolfram Data Summit 2013, Washington DC

2013-04-23 "More Archives, More Better", IIPC General Assembly 2013, Ljubljana, Slovenia

2013-04-22 “Old Dominion University Computer Science IIPC New Member”, IIPC General Assembly 2013, Ljubljana, Slovenia

2012-09-10 “A Plan For Curating "Obsolete Data or Resources"”, UNC/NSF Workshop "Curating for Quality: Ensuring Data Quality to Enable New Science", Arlington, VA

2011-10-24 “Memento: Time Travel for the Web”, UNT College of Information Colloquium, Denton, TX

2011-10-24 “Memento: Time Travel for the Web”, UNT College of Information Colloquium, Denton, TX

2011-05-10 “Memento: Updated technical details”, 2011 IIPC General Assembly, The Hague, the Netherlands

2010-11-10 “Memento: Time Travel for the Web”, UNC Scholarly Communications Working Group, Chapel-Hill, NC

2010-09-09 “My Point of View”, Web Archiving Cooperative Kick-off Meeting, Menlo-Park, CA

2010-09-09 “Review of Web Archiving”, Web Archiving Cooperative Kick-off Meeting, Menlo-Park, CA

2010-06-21 “Memento: Time Travel for the Web”, NDIIPP Partners Meeting, Washington DC

2009-12-15 “Memento: Time Travel for the Web”, CNI Fall 2009 Project Briefing, Washington DC

2009-11-16 “Memento: Time Travel for the Web”, Library of Congress Brown Bag Seminar, Washington DC

2009-10-29 “The Open Archives Initiative Object Reuse and Exchange Project”, Keynote at RIBDA 2009, Lima Peru

2009-10-15 “The Open Archives Initiative Object Reuse and Exchange Project”, Keynote at WCI 2009, Berlin Germany

2009-10-02 “(Re-)Discovering Lost Web Pages”, Emory University Computer Science Department Colloquium, Atlanta GA

2009-10-01 “The Open Archives Initiative Object Reuse and Exchange Project”, Emory University Library Colloquium, Atlanta GA

2009-06-25 “Synchronicity: Just-In-Time Discovery of Lost Web Pages”, NDIIPP Partners Meeting, Washington DC

2009-03-13 “Can’t Find Your 404s?”, Santa Fe Complex Colloquium, Santa Fe NM

2009-03-12 “(Re-)Discovering Lost Web Pages”, LANL Research Library Colloquium, Los Alamos NM

2008-09-07 “Tools for a Preservation-Ready Web”, NDIIPP Partners Meeting, Ballston VA

2008-07-20 “Recommendations for a NASA Digital Library”, NASA LaRC Technical Library Branch, Hampton VA

2007-05-16 “The Open Archives Initiative”, Digital data preservation, sharing, and discovery: Challenges for Small Science Communities in the Digital Era, Durham NC

2007-01-17 “Using OAI-PMH Resource Harvesting & MPEG-21 DIDL for Digital Preservation”, NDIIPP Partners Meeting, San Diego CA

2006-12-06 “How much preservation do I get if I do absolutely nothing? Using the Web Infrastructure for Digital Preservation”, Media Produtcion 2006, Berlin Germany

2006-12-01 "Evaluating Ingest Success: Using the AIHT", DCC/LUCAS Workshop, Liverpool UK

2006-06-29 “Thinking Differently About Web Page Preservation”, Library of Congress Seminar, Washington DC

2005-10-20 “What’s new from the OAI”, OAI-4, Geneva Switzerland

2005-10-20 “OAI-PMH for resource harvesting”, OAI-4, Geneva Switzerland

2005-07-12 “ODU AIHT”, NDIIPP Partners Meeting, Warrenton VA

2005-06-23 “A New Model for Web Resource Harvesting”, NASA/Raytheon Technology Infusion Team Meeting, Hampton VA

2005-05-17 “Shared Infrastructure Preservation Models”, DIGARCH PI Meeting, Atlanta GA

2005-05-05 “Harvesting Resources with OAI-PMH”, SOLINET Annual Membership Meeting, Atlanta GA

2005-03-29 “A New Model for Web Resource Harvesting”, University of Florida Department of Computer Science Colloquium

2004-05-28 “Implementation of Digital Libraries”, International Congress of Health Information, Lima Peru

2004-05-06 “A Review of Institutional Repository Projects and Technologies”, Texas A&M Department of Computer Science Colloquium

2003-11-03 “New Digital Library Possibilities Using the OAI-PMH”, First Latin American Workshop on the Production and Diffusion of Electronic Theses, Santiago Chile

2003-09-16 “Self-Preserving Digital Objects”, AISTI Mini Conference, Santa Fe New Mexico

2003-09-12 “Institutional Archives Technology Overview”, FLICC Workshop: Institutional Archives and Repositories in Government, Washington DC

2003-06-24 “U.S. Government Use of the OAI-PMH”, IndoUS Workshop on Open Digital Libraries and Interoperability, Arlington VA

2003-03-20 “U.S. Government Use of the OAI-PMH”, ISTEC / NSF Ibero-American Digital Library Joint Project Development Symposium, Campinas, Brazil

2003-02-05 “Service Providers: Future Perspectives”, Professional Scholarly Publishing Annual Conference, Washington DC

2002-10-18 “Service Providers: Future Perspectives”, OAI Workshop, CERN Switzerland

2002-10-02 “New Digital Library Possibilities Using the Open Archives Initiative Protocol for Metadata Harvesting (OAI-PMH)”, International Conference on Scientific Electronic Publishing in Developing Countries, Valparaiso, Chile

2002-05-13 “New Developments in OAI”, Open Archives Forum, Pisa Italy

2002-04-03 “OAI: XML-Based Digital Library Interoperability”, CENDI: Federal STI Managers Meeting, Beltsville MD

2001-08-16 “OAI: Past, Present and Future”, Managing Digital Video Content Workshop, Atlanta GA

2001-07-11 “OAI: Past, Present and Future”, Open Archives Meeting: Developing an Agenda for Institutional E-print Archives, London UK

2001-04-21 "Uses of OAI in NASA", NASA STI Managers Meeting, Greenbelt MD

2000-12-12 "The Open Archives Initiative", Exploration 2000: Workshop on Web-Based Language Documentation and Description, Philadelphia, PA

1999-11-09 "Smart Objects and Dumb Archives: Using Buckets in Digital Libraries", ICASE Colloquium, Hampton, VA

1996-10-24 "Understanding the Internet's Role in Technology Transfer and Organizational Strategy", October Meeting of the Pittsburgh Large User Group (PLUG), Pittsburgh, PA

1996-10-09 "Using DCE/DFS in a Production Workstation Cluster", ICASE/LaRC 2nd Industry Roundtable, Williamsburg, VA

1996-06-24 "WWW: An Overview of Technologies, Concepts, and Directions", Army Training Support Center, Fort Eustis, VA

1994-10-22 "Changing the Way We do Business Through Use of the World Wide Web and NCSA Mosaic", Virginia Society of Professional Engineers, Hampton, VA

1993-05-11 "PVM Use in Computational Aerosciences Projects", First PVM Users Group Meeting, Knoxville, TN

Ph.D. Students

2007 **Frank McCown**, *Lazy Preservation: Reconstructing Websites from the Web Infrastructure*, Initial employment: Assistant Professor, Harding University.

2008 **Joan A. Smith**, *Integrating Preservation Functions Into the Web Server*, Initial employment: Chief Technology Strategist, Emory University Libraries.

2011 **Martin Klein**, *Using the Web Infrastructure for Real Time Recovery of Missing Web Pages*, Initial employment: Post-doctoral Researcher, Los Alamos National Laboratory.

2014 **Ahmed Alsum**, *Web Archive Services Framework For Tighter Integration Between the Past and Present Web*, Initial employment: Web Archive Engineer, Stanford University Libraries.

2014 **Charles L. Cartledge**, *Unsupervised Small-World (USW): A Framework for Web Object Self-Preservation*, Initial employment: System Engineer, Fulcrum LLC.

2015 **Hany SalahEldeen**, *Detecting, Modeling, and Predicting User Temporal Intention in Social Media*, Initial employment: Technical Staff, Microsoft.

2016 **Justin Brunelle**, *Scripts in a Frame: A Framework for Archiving Deferred Representations*, Initial employment: Lead Researcher, MITRE.

2016 **Yasmin AlNomany**, *Using Web Archives to Enrich the Live Web Experience Through Storytelling*, Initial employment: Post-doctoral Researcher, UC Berkeley.

2019 **Lulwah Alkwai**, *Expanding the Usage of Web Archives by Recommending Archived Webpages Using Only the URI*, Initial employment: Lecturer, University of Hail (Saudi Arabia), (joint with Prof. M. C. Weigle).

2019 **Mat Kelly**, *Aggregating Private and Public Web Archives Using the Mementity Framework*, Initial employment: Assistant Professor, Drexel University, (joint with Prof. M. C. Weigle).

2020 **Alexander Nwala**, *Bootstrapping Web Archive Collections From Micro-Collections in Social Media*, Initial employment: Post-doctoral Researcher, Indiana University.

2020 **Mohamed Aturban**, *A Framework for Verifying the Fixity of Archived Web Resources*, Initial employment: Assistant Professor, Columbia College, (joint with Prof. M. C. Weigle).

2020 **Sawood Alam**, *MementoMap: A Web Archive Profiling Framework for Efficient Memento Routing*, Initial employment: Web and Data Scientist, Internet Archive.

2021 **Shawn Jones**, *Improving Collection Understanding For Web Archives With Storytelling: Shining Light Into Dark and Stormy Archives*, Initial employment: Post-doctoral Researcher, Los Alamos National Laboratory.

2022 **Corren McCoy**, *A Relevance Model for Threat-Centric Ranking of Cybersecurity Vulnerabilities*, Initial employment: G2 Ops, (joint with Prof. M. C. Weigle).

current **David Calano**, Dissertation Topic: TBD.

current **James Ecker**, Dissertation Topic: TBD.

current **Emily Escamilla**, Dissertation Topic: TBD.

current **Kritika Garg**, Dissertation Topic: TBD.

current **Hussam Hallak**, Dissertation Topic: TBD.

current **Himarsha Jayanetti**, Dissertation Topic: TBD, (joint with Prof. M. C. Weigle).

current **Travis Reid**, Dissertation Topic: Gaming concepts and Web Archiving, (joint with Prof. M. C. Weigle).

current **Tarannum Zaki**, Dissertation Topic: TBD, (joint with Prof. M. C. Weigle).

M.S. Students

Thesis Option

2005 **Terry L. Harrison**, *Opal: In Vivo Based Preservation Framework for Locating Lost Web Pages*, Initial employment: Library of Congress (CACI).

2008 **Rabia Haq**, *Using Timed-Release Cryptograhy to Mitigate the Preservation Risk of Embargo Periods*, Initial employment: PhD program, ODU MSVE.

2012 **Kalpesh Padia**, *Visualizing Digital Collections at Archive-It*, Initial employment: PhD program, NCSU CS, (joint with Prof. M. C. Weigle).

2013 **Sawood Alam**, *HTTP Mailbox - Asynchronous RESTful Communication*, Initial employment: PhD program, ODU CS.

2015 **Shawn Jones**, *Using the Memento MediaWiki Extension to Avoid Spoilers*, Initial employment, PhD program: ODU CS.

2018 **John Berlin**, *To Relive The Web: A Framework For The Transformation And Archival Replay Of Web Pages*, Initial employment: Rhizome at the New Museum, (joint with Prof. M. C. Weigle).

Project Option

2004 Sheffan Chan, Thomas Lutkenhouse

2005 Aravind Elango, Giridhar Manepalli, Suchitra Manepalli, Daniel Swaney

2006 Ignacio Garcia del Campo

2007 Amine Benjelloun, Manoranjan Magudam

2008 Olena Hunsicker, Venkata Sai Krishna Kamineni, Satish Lakkoju, Krishnan Ganesh Madras

2009 Sudhir Koneru, Venkata Potta

2010 Scott Ainsworth, Matthias Prellwitz, Jeffery Shipman, Jeb Ware

2011 Carlton Northern

2020 Puneeth Bikkasandra Puttaramegowda

Teaching

Old Dominion University

CS 895 Web-Based Information Retrieval - S14, S13, F11

CS 895 Time on the Web - F10

CS 795/895 Web Archiving Forensics - F22, F20, S19

CS 795/895 Collective Intelligence - S09

CS 791/891 Web Archiving Seminar - F17

CS 791/891 Web Syndication Formats - S08

CS 791/891 Technologies of Google Seminar - S07

CS 791/891 Economics of Information Seminar - S06

CS 791/891 Digital Preservation Seminar - S05, S04

CS 751/851 Introduction to Digital Libraries - S15, S11, S10, F06

CS 734/834 Introduction to Information Retrieval - F17, F16, F15

CS 695 Introduction to Digital Libraries - F05, F04, F03, F02

CS 495/595 Web Security - S22, S21

CS 495/595 Introduction to Web Science - F14, F13

CS 495/595 Peer-to-Peer Information Systems - F04, F03

CS 495/595 Web Server Design - S12, S09, S07, S06

CS 432/532 Web Science - S17, S16

CS 431/531 Web Server Design - F18

CS 418/518 Web Programming - F08, F07, F06

CS 410 Computer Based Productivity I - S03

CS 395 Research Methods in Data and Web Science - S20

CS 300 Computers in Society - F21

University of North Carolina

INLS 110 Introduction to Digital Libraries - S01

INLS 210 Complex Objects for Digital Libraries - S01

Old Dominion University (While at NASA LaRC)

CS 495/595 Introduction to Digital Libraries - F99

CS 745/845 Introduction to Digital Libraries - F98

Service

Editorial Boards

2005-present International Journal of Digital Libraries (IJDL)

2005-2006 ACM Journal on Education Resources in Computing (JERIC)

Steering Committees

2014-2020 JCDL Steering Committee Chair

2011-current JCDL Steering Committee

Doctoral Consortia

2022-2008 Member, JCDL Doctoral Consortium

Organizing Committees

2023 PC Co-Chair, International Conference on Digital Preservation (iPres)
2022 Workshop and Tutorial Co-Chair, ACM/IEEE Joint Conference on Digital Libraries
2020–2017 Continuity Chair, ACM/IEEE Joint Conference on Digital Libraries
2013 Program Co-Chair, 10th International Conference on Preservation of Digital Objects (iPRES)
2012 Program Co-Chair, ACM/IEEE Joint Conference on Digital Libraries
2011, 2009, 2008 Doctoral Consortium Co-Chair, ACM/IEEE Joint Conference on Digital Libraries
2011, 2007 Workshop Chair, ACM/IEEE Joint Conference on Digital Libraries
2006 Program Co-Chair, ACM/IEEE Joint Conference on Digital Libraries
2005 Tutorial Co-Chair, ACM/IEEE Joint Conference on Digital Libraries
2002 Co-Chair, Workshop on Distributed Computing Architectures for Digital Libraries (joint with ICPP 2002)
2001 Sponsoring and Exhibiting Chair, ACM/IEEE Joint Conference on Digital Libraries
2001 Co-Chair, Workshop on Experimental OAI-Based Digital Library Systems (joint with ECDL 2001)

Program Committees

2022–2011 Theory and Practice of Digital Libraries (TPDL)
2021 IEEE International Conference on Multimedia Big Data 2021
2022–2002 ACM/IEEE Joint Conference on Digital Libraries (JCDL)
2022–2011 Temporal Web Analytics Workshop (TWAW)
2017–2010 ACM Special Interest Group on Information Retrieval (SIGIR)
2014 Digital Preservation (NDIIPP/NDSA)
2012 ACM International Conference on Web Search and Data Mining (WSDM)
2009, 2007, 2005 ACM Workshop on Web Information and Data Management (WIDM)
2010, 2009 European Conference on Digital Libraries (ECDL)
2005–2003 Healthcare Digital Libraries Workshop (HDL)
2016–2011, 2008, 2007 International Conference on Asian Digital Libraries (ICADL)
2009 International Workshop on Innovation in Digital Preservation (InDP)
2010, 2009 International Web Archiving Workshop (IWAW)
2009 International World Wide Web Conference (WWW)

Reviewer

includes ACM Journal on Educational Resources in Computing, ACM Transactions on Internet Technology,ACM Transactions on the Web, Communications of the ACM, Data & Knowledge Engineering, IEEE Internet Computing, IEEE Intelligent Systems, IEEE Systems, Man and Cybernetics Part A, IEEE Transactions on Computers, IEEE Transactions on Parallel and Distributed Systems, Information Sciences, International Journal of Digital Libraries, Health Informatics Journal

Advisory Boards

2021-present ACM Digital Library Board
2018-present ODU MLIS Advisory Board
2017-2021 ACM Publications Board
2013-2017 Virginia Tech, Integrated Digital Event Archiving and Library (IDEAL)
2006-present University of Arizona, Graduate Certificate in Digital Information Management
2001-2015 Open Language Archive Community (OLAC)
2016-2018 Documenting the Now
2008-2010 H-Net Archivist Advisory Board

Professional Society Memberships

- Member, Association of Computing Machinery (ACM)