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

Version: Wed Feb 28 16:26:38 EST 2024

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, 9 current (advising and co-advising)
Grants:	39 Grants (PI on 23), $13.5M in total funding, including an NSF CAREER award
Publications:	300+ publications, 9000+ citations, h=42, 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

2023–present	**Deputy Director**, *School of Data Science, Old Dominion University*, Norfolk, VA.
2022–2023	**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**, *Computer Science, Old Dominion University*, Norfolk, VA.
2008–2015	**Associate Professor**, *Computer Science, Old Dominion University*, Norfolk, VA.
2002–2008	**Assistant Professor**, *Computer Science, 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

2023	**Best Student Paper Award (Lesley Frew)**, *JCDL 2023*.
2023	**Best Short Paper Award**, *JCDL 2023*.
2023	**Best Poster Award**, *JCDL 2023*.
2023	**Vannevar Bush Best Paper Finalist**, *JCDL 2023*.
2021	**Best Paper Award**, *TPDL 2021*.
2019	**2X Best Student Paper Finalist (Alexander Nwala; Sawood Alam)**, *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, A. Poole, "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. *PloS one*, 18(6), 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. *International Journal on Digital Libraries*, 2023.

[3] Sawood Alam, Michele C. Weigle, and Michael L. Nelson. Profiling web archival voids using access logs for Memento routing. *International Journal on Digital Libraries*, 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. *ACM Transactions on the Web*, 18(1), 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*, 17(4), 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] Emily Escamilla, Martin Klein, Talya Cooper, Vicky Rampin, Michele C. Weigle, and Michael L. Nelson. Cited but not archived: Analyzing the status of code references in scholarly articles. In *Proceedings of International Conference on Asian Digital Libraries (ICADL)*, 2023.

[2] Shawn M Jones, Himarsha R Jayanetti, Martin Klein, Michele C Weigle, and Michael L Nelson. Synthesizing web archive collections into big data: Lessons from mining data from web archives. In *International Conference on Theory and Practice of Digital Libraries*, pages 220–229. Springer, 2023.

[3] Emily Escamilla, Lamia Salsabil, Martin Klein, Jian Wu, Michele C Weigle, and Michael L Nelson. It's not just github: Identifying data and software sources included in publications. In *International Conference on Theory and Practice of Digital Libraries*, pages 195–206. Springer, 2023.

[4] Lyudmila Balakireva, Emily Escamilla, Talya Cooper, Michael L Nelson, and Michele C Weigle. The memento tracer toolset for human-guided focused crawling of dynamic web. In *2023 ACM/IEEE Joint Conference on Digital Libraries (JCDL)*, pages 265–266. IEEE, 2023.

[5] Sawood Alam, Kritika Garg, Michele C Weigle, Michael L Nelson, Mark Graham, and Dietrich Ayala. Trendmachine: A temporal webpage resilience portal. In *2023 ACM/IEEE Joint Conference on Digital Libraries (JCDL)*, pages 93–97. IEEE, 2023.

[6] Lesley Frew, Michael L Nelson, and Michele C Weigle. Making changes in webpages discoverable: A change-text search interface for web archives. In *2023 ACM/IEEE Joint Conference on Digital Libraries (JCDL)*, pages 71–81. IEEE, 2023.

[7] Michele C Weigle, Michael L Nelson, Sawood Alam, and Mark Graham. Right HTML, wrong JSON: Challenges in replaying archived webpages built with client-side rendering. In *2023 ACM/IEEE Joint Conference on Digital Libraries (JCDL)*, pages 82–92. IEEE, 2023.

[8] 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.

[9] 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.

[10] 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.

[11] 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.

[12] 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.

[13] 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.

[14] 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.

[15] 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.

[16] 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.

[17] 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.

[18] 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.

[19] 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.

[20] 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.

[21] 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.

[22] 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.

[23] 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.

[24] 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.

[25] 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.

[26] 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.

[27] 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.

[28] 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.

[29] 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.

[30] 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.

[31] 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.

[32] Alexander C. Nwala, Michele C. Weigle, and Michael L. Nelson. Bootstrapping web archive collections from social media. In *Proceedings of ACM Hypertext*, pages 64–72, 2018.

[33] Grant Atkins, Alexander C. Nwala, Michele C. Weigle, and Michael L. Nelson. Measuring news similarity across ten U.S. news sites. In *Proceedings of iPres*, 2018.

[34] Shawn M. Jones, Michele C. Weigle, and Michael L. Nelson. The off-topic Memento toolkit. In *Proceedings of iPres*, 2018.

[35] Shawn M. Jones, Alexander C. Nwala, Michele C. Weigle, and Michael L. Nelson. The many shapes of Archive-It. In *Proceedings of iPres*, 2018.

[36] Alexander C. Nwala, Michele C. Weigle, and Michael L. Nelson. Scraping SERPs for archival seeds: It matters when you start. In *JCDL '18: Proceedings of the 17th ACM/IEEE-CS Joint Conference on Digital Libraries*, pages 263–272, 2018.

[37] Mat Kelly, Michael L. Nelson, and Michele C. Weigle. A framework for aggregating private and public web archives. In *JCDL '18: Proceedings of the 17th ACM/IEEE-CS Joint Conference on Digital Libraries*, pages 273–282, 2018.

[38] Mohamed Aturban, Mat Kelly, Sawood Alam, John A. Berlin, Michael L. Nelson, and Michele C. Weigle. ArchiveNow: Simplified, extensible, multi-archive preservation. In *JCDL '18: Proceedings of the 17th ACM/IEEE-CS Joint Conference on Digital Libraries*, pages 321–322, 2018.

[39] Sawood Alam, Mat Kelly, Michele C. Weigle, and Michael L. Nelson. Unobtrusive and extensible archival replay banners using custom elements. In *JCDL '18: Proceedings of the 18th ACM/IEEE-CS Joint Conference on Digital Libraries*, pages 319–320, 2018.

[40] Yasmin AlNoamany, Michele C. Weigle, and Michael L. Nelson. Generating stories from archived collections. In *Proceedings of the 9th ACM Conference on Web Science*, pages 309–318, 2017.

[41] Sawood Alam, Mat Kelly, Michele C. Weigle, and Michael L. Nelson. Client-side reconstruction of composite Mementos using ServiceWorker. In *JCDL '17: Proceedings of the 17th ACM/IEEE-CS Joint Conference on Digital Libraries*, pages 237–240, 2017.

[42] John A. Berlin, Mat Kelly, Michael L. Nelson, and Michele C. Weigle. WAIL: Collection-based personal web archiving. In *JCDL '17: Proceedings of the 17th ACM/IEEE-CS Joint Conference on Digital Libraries*, pages 340–341, 2017.

[43] Justin F. Brunelle, Michele C. Weigle, and Michael L. Nelson. Archival crawlers and JavaScript: Discover more stuff but crawl more slowly. In *JCDL '17: Proceedings of the 17th ACM/IEEE-CS Joint Conference on Digital Libraries*, pages 1–10, 2017.

[44] Mat Kelly, Lulwah M. Alkwai, Sawood Alam, Michael L. Nelson, Michele C. Weigle, and Herbert Van de Sompel. Impact of URI canonicalization on Memento count. In *JCDL '17: Proceedings of the 17th ACM/IEEE-CS Joint Conference on Digital Libraries*, pages 303–304, 2017. (Also available as arXiv:1703.03302).

[45] Alexander C. Nwala, Michele C. Weigle, Michael L. Nelson, Adam B. Ziegler, and Anastasia Aizman. Local Memory Project: Providing tools to build collections of stories for local events from local sources. In *JCDL '17: Proceedings of the 17th ACM/IEEE-CS Joint Conference on Digital Libraries*, pages 219–228, 2017.

[46] Mat Kelly, Sawood Alam, Michael L. Nelson, and Michele C. Weigle. Interplanetary wayback: Peer-to-peer permanence of web archives. In *Proceedings of Theory and Practice of Digital Libraries (TPDL)*, pages 411–416, 2016.

[47] Sawood Alam, Michael L. Nelson, Herbert Van de Sompel, and David S. H. Rosenthal. Web archive profiling through fulltext search. In *Proceedings of Theory and Practice of Digital Libraries (TPDL)*, pages 121–132, 2016.

[48] Sawood Alam, Mat Kelly, and Michael L. Nelson. InterPlanetary Wayback: The permanent web archive. In *JCDL '16: Proceedings of the 16th ACM/IEEE-CS Joint Conference on Digital Libraries*, pages 273–274, 2016.

[49] Sawood Alam and Michael L. Nelson. MemGator - a portable concurrent Memento aggregator: Cross-platform CLI and server binaries in Go. In *JCDL '16: Proceedings of the 16th ACM/IEEE-CS Joint Conference on Digital Libraries*, pages 243–244, 2016.

[50] Alexander Nwala and Michael L. Nelson. A supervised learning algorithm for binary domain classification of web queries using SERPs. In *JCDL '16: Proceedings of the 16th ACM/IEEE-CS Joint Conference on Digital Libraries*, pages 237–238, 2016.

[51] Justin F. Brunelle, Michele C. Weigle, and Michael L. Nelson. Archiving deferred representations using a two-tiered crawling approach. In *iPRES 2015: Proceedings of the 12th International Conference on Preservation of Digital Objects*, 2015. (Also available as arXiv:1508.02315).

[52] Scott G. Ainsworth, Michael L. Nelson, and Herbert Van de Sompel. Only one out of five archived web pages existed as presented. In *Proceedings of ACM Hypertext*, pages 257–266, 2015.

[53] Sawood Alam, Michael L. Nelson, Herbert Van de Sompel, Lyudmila Balakireva, Harihar Shankar, and David S. H. Rosenthal. Web archive profiling through cdx summarization. In *Proceedings of Theory and Practice of Digital Libraries (TPDL)*, pages 3–14, 2015.

[54] Mohamed Aturban, Michael L. Nelson, and Michele C. Weigle. Quantifying orphaned annotations in Hypothes.is. In *Proceedings of Theory and Practice of Digital Libraries (TPDL)*, pages 15–27, 2015.

[55] Yasmin AlNoamany, Michele C. Weigle, and Michael L. Nelson. Detecting off-topic pages in web archives. In *Proceedings of Theory and Practice of Digital Libraries (TPDL)*, pages 225–237, 2015.

[56] Yasmin AlNoamany, Michele C. Weigle, and Michael L. Nelson. Characteristics of social media stories. In *Proceedings of Theory and Practice of Digital Libraries (TPDL)*, pages 267–279, 2015.

[57] Hany M. SalahEldeen and Michael L. Nelson. Predicting temporal intention in resource sharing. In *JCDL '15: Proceedings of the 15th ACM/IEEE-CS Joint Conference on Digital Libraries*, pages 205–214, 2015.

[58] Wesley Jordan, Mat Kelly, Justin F. Brunelle, Laura Vobrak, Michele C. Weigle, and Michael L. Nelson. Mobile mink: Merging mobile and desktop archived webs. In *JCDL '15: Proceedings of the 15th ACM/IEEE-CS Joint Conference on Digital Libraries*, pages 243–244, 2015.

[59] Lulwah Alkwai, Michael L. Nelson, and Michele C. Weigle. How well are Arabic websites archived? In *JCDL '15: Proceedings of the 15th ACM/IEEE-CS Joint Conference on Digital Libraries*, pages 223–232, 2015.

[60] Sawood Alam, Fateh ud din B Mehmood, and Michael L. Nelson. Improving accessibility of archived raster dictionaries of complex script languages. In *JCDL '15: Proceedings of the 15th ACM/IEEE-CS Joint Conference on Digital Libraries*, pages 47–56, 2015. (Also available as arXiv:1409.1284).

[61] Mat Kelly, Michael L. Nelson, and Michele C. Weigle. The archival acid test: Evaluating archive performance on advanced HTML and JavaScript. In *JCDL '14: Proceedings of the 14th ACM/IEEE-CS Joint Conference on Digital Libraries*, pages 25–28, 2014.

[62] Mat Kelly, Michael L. Nelson, and Michele C. Weigle. Mink: Integrating the live and archived web viewing experience using web browsers and Memento. In *JCDL '14: Proceedings of the 14th ACM/IEEE-CS Joint Conference on Digital Libraries*, pages 469–470, 2014.

[63] 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. In *JCDL '14: Proceedings of the 14th ACM/IEEE-CS Joint Conference on Digital Libraries*, pages 321–330, 2014.

[64] Charles L. Cartledge and Michael L. Nelson. When should I make preservation copies of myself? In *JCDL '14: Proceedings of the 14th ACM/IEEE-CS Joint Conference on Digital Libraries*, pages 1–10, 2014.

[65] Ahmed AlSum and Michael L. Nelson. Thumbnail summarization techniques for web archives. In *ECIR '14: Proceedings of the 36th European Conference in Information Retrieval*, pages 299–310, 2014.

[66] Frank McCown and Michael L. Nelson. Resources for teaching web science to computer science undergraduates. In *Proceedings of ACM SIGCSE*, 2014.

[67] Mat Kelly, Michael L. Nelson, and Michele C. Weigle. Graph-based navigation of a box office prediction system. In *Proceedings of IEEE Visualization (VIS 2013)*, 2013.

[68] Mat Kelly, Justin F. Brunelle, Michele C. Weigle, and Michael L. Nelson. On the change in archivability of websites over time. In *Proceedings of Theory and Practice of Digital Libraries (TPDL)*, pages 35–47, 2013.

[69] Justin F. Brunelle, Michael L. Nelson, Lyudmila Balakireva, Robert Sanderson, and Herbert Van de Sompel. Evaluating sitestory with the ApacheBench tool. In *Proceedings of Theory and Practice of Digital Libraries (TPDL)*, pages 204–215, 2013.

[70] Yasmin AlNoamany, Ahmed AlSum, Michele C. Weigle, and Michael L. Nelson. Who and what links to the Internet Archive. In *Proceedings of Theory and Practice of Digital Libraries (TPDL)*, pages 346–357, 2013.

[71] Ahmed AlSum, Michele C. Weigle, Michael L. Nelson, and Herbert Van de Sompel. Profiling web archive coverage for top-level domain and content language. In *Proceedings of Theory and Practice of Digital Libraries (TPDL)*, pages 60–71, 2013.

[72] Hany M. SalahEldeen and Michael L. Nelson. Resurrecting my revolution: Using social link neighborhood in bringing context to the disappearing web. In *Proceedings of Theory and Practice of Digital Libraries (TPDL)*, pages 333–345, 2013.

[73] Justin F. Brunelle and Michael L. Nelson. An evaluation of caching policies for memento timemaps. In *JCDL '13: Proceedings of the 13th ACM/IEEE-CS Joint Conference on Digital Libraries*, pages 267–276, 2013.

[74] Scott G. Ainsworth and Michael L. Nelson. Evaluating sliding and sticky target policies by measuring temporal drift in random walks through a web archive. In *JCDL '13: Proceedings of the 13th ACM/IEEE-CS Joint Conference on Digital Libraries*, pages 39–48, 2013.

[75] Hany M. SalahEldeen and Michael L. Nelson. Reading the correct history? modeling temporal intention in resource sharing. In *JCDL '13: Proceedings of the 13th ACM/IEEE-CS Joint Conference on Digital Libraries*, pages 257–266, 2013.

[76] Yasmin AlNoamany, Michele C. Weigle, and Michael L. Nelson. Access patterns for robots and humans in web archives. In *JCDL '13: Proceedings of the 13th ACM/IEEE-CS Joint Conference on Digital Libraries*, pages 339–348, 2013.

[77] Ahmed AlSum and Michael L. Nelson. ArcLink: Optimization techniques to build and retrieve the temporal web graph. In *JCDL '13: Proceedings of the 13th ACM/IEEE-CS Joint Conference on Digital Libraries*, pages 377–378, 2013.

[78] Heather Tweedy, Frank McCown, and Michael L. Nelson. A Memento web browser for iOS. In *JCDL '13: Proceedings of the 13th ACM/IEEE-CS Joint Conference on Digital Libraries*, pages 371–372, 2013.

[79] Daniel Sebastia, Frank McCown, and Michael L. Nelson. Semi-automated rediscovery of lost YouTube music videos. In *JCDL '13: Proceedings of the 13th ACM/IEEE-CS Joint Conference on Digital Libraries*, pages 421–422, 2013.

[80] Bernhard Haslhofer, Simeon Warner, Carl Lagoze, Martin Klein, Robert Sanderson, Michael L. Nelson, and Herbert Van de Sompel. ResourceSync: leveraging sitemaps for resource synchronization. In *WWW (Companion Volume)*, pages 11–14, 2013.

[81] Ahmed Alsum, Michael L. Nelson, Robert Sanderson, and Herbert Van de Sompel. Archival HTTP redirection retrieval policies. In *Proceedings of TempWeb 2013*, 2013.

[82] Hany SalahEldeen and Michael L. Nelson. Carbon dating the web: estimating the age of web resources. In *Proceedings of TempWeb 2013*, 2013.

[83] Hany SalahEldeen and Michael L. Nelson. Losing my revolution: How many resources shared on social media have been lost? In *Proceedings of Theory and Practice of Digital Libraries (TPDL)*, pages 125–137, 2012.

[84] Carlton Northern and Michael L. Nelson. Unsupervised approach to discovering and disambiguating social media profiles. In *Proceedings of Mining Data Semantics (MDS 2011)*, 2011.

[85] Martin Klein and Michael L. Nelson. Find, new, copy, web, page - tagging for the (re-)discovery of web pages. In *Proceedings of Theory and Practice of Digital Libraries (TPDL)*, pages 27–39, 2011.

[86] Matthias Prellwitz and Michael L. Nelson. Music video redundancy and half-life in YouTube. In *Proceedings of Theory and Practice of Digital Libraries (TPDL)*, pages 143–150, 2011.

[87] Scott G. Ainsworth, Ahmed Alsum, Hany SalahEldeen, Michele C. Weigle, and Michael L. Nelson. How much of the web is archived? In *Proceedings of the 11th annual international ACM/IEEE Joint Conference on Digital Libraries*, JCDL '11, pages 133–136, 2011.

[88] Martin Klein, Jeb Ware, and Michael L. Nelson. Rediscovering missing web pages using link neighborhood lexical signatures. In *Proceedings of the 11th annual international ACM/IEEE Joint Conference on Digital Libraries*, JCDL '11, pages 137–140, 2011.

[89] Abdulla Alasaadi and Michael L. Nelson. Persistent annotations deserve new uris. In *Proceedings of the 11th annual international ACM/IEEE Joint Conference on Digital Libraries*, JCDL '11, pages 195–198, 2011.

[90] Martin Klein, Moustafa Aly, and Michael L. Nelson. Synchronicity: automatically rediscover missing web pages in real time. In *Proceedings of the 11th annual international ACM/IEEE Joint Conference on Digital Libraries*, JCDL '11, pages 475–476, 2011.

[91] Martin Klein, Jeffery L. Shipman, and Michael L. Nelson. Is This a Good Title? In *HT '10: Proceedings of the 21st ACM Conference on Hypertext and Hypermedia*, pages 3–12, 2010.

[92] Charles L. Cartledge and Michael L. Nelson. Analysis of Graphs for Digital Preservation Suitability. In *HT '10: Proceedings of the 21st ACM Conference on Hypertext and Hypermedia*, pages 109–118, 2010.

[93] Martin Klein and Michael L. Nelson. Evaluating methods to rediscover missing web pages from the web infrastructure. In *JCDL '10: Proceedings of the 10th ACM/IEEE-CS Joint Conference on Digital Libraries*, pages 59–68, 2010.

[94] Herbert Van de Sompel, Robert Sanderson, Michael L. Nelson, Lyudmila L. Balakireva, Harihar Shankar, and Scott Ainsworth. An HTTP-Based Versioning Mechanism for Linked Data. In *Proceedings of the Linked Data on the Web Workshop (LDOW 2010)*, 2010. (Also available as arXiv:1003.3661).

[95] Martin Klein and Michael L. Nelson. Investigating the change of web pages' titles over time. In *Proceedings of the First International Workshop on Innovation in Digital Preservation*, 2009. (Also available as arXiv:0907.3445).

[96] Martin Klein, Olena Hunsicker, and Michael L. Nelson. Comparing the performance of us college football teams in the web and on the field. In *HT '09: Proceedings of the 20th ACM Conference on Hypertext and Hypermedia*, pages 63–72, New York, NY, USA, 2009. ACM.

[97] Charles L. Cartledge and Michael L. Nelson. Unsupervised creation of small world networks for the preservation of digital objects. In *JCDL '09: Proceedings of the 9th ACM/IEEE-CS Joint Conference on Digital Libraries*, pages 349–352, New York, NY, USA, 2009. ACM.

[98] Martin Klein, Olena Hunsicker, and Michael L. Nelson. Correlation of music charts and search engine rankings. In *JCDL '09: Proceedings of the 9th ACM/IEEE-CS Joint Conference on Digital Libraries*, pages 415–416, New York, NY, USA, 2009. ACM.

[99] Martin Klein and Michael L. Nelson. Inter-search engine lexical signature performance. In *JCDL '09: Proceedings of the 9th ACM/IEEE-CS Joint Conference on Digital Libraries*, pages 413–414, New York, NY, USA, 2009. ACM.

[100] Frank McCown and Michael L. Nelson. What happens when facebook is gone? In *JCDL '09: Proceedings of the 9th ACM/IEEE-CS Joint Conference on Digital Libraries*, pages 251–254, New York, NY, USA, 2009. ACM.

[101] Frank McCown and Michael L. Nelson. A framework for describing web repositories. In *JCDL '09: Proceedings of the 9th ACM/IEEE-CS Joint Conference on Digital Libraries*, pages 341–344, New York, NY, USA, 2009. ACM.

[102] Rabia Haq and Michael L. Nelson. Using timed-release cryptography to mitigate the preservation risk of embargo periods. In *JCDL '09: Proceedings of the 9th ACM/IEEE-CS Joint Conference on Digital Libraries*, pages 183–192, New York, NY, USA, 2009. ACM.

[103] Carl Lagoze, Herbert Van de Sompel, Pete Johnston, Michael L. Nelson, Robert Sanderson, and Simeon Warner. Adding eScience Assets to the Data Web. In *Proceedings of the Linked Data on the Web Workshop (LDOW 2009)*, 2009. (Also available as arXiv:0906.2135).

[104] Martin Klein and Michael L. Nelson. Approximating document frequency with term count values. In *ECIR '09: Proceedings of the 31st European Conference in Information Retrieval*, pages 620–627, 2009. (Also available as arXiv:0807.3755).

[105] Frank McCown, Michael L. Nelson, and Herbert Van de Sompel. Everyone is a curator: Human-assisted preservation for ORE aggregations. In *Proceedings of DigCCurr 2009*, 2009.

[106] Carl Lagoze, Michael L. Nelson, Herbert Van de Sompel, Simeon Warner, Robert Sanderson, and Pete Johnston. A web-based resource model for escience: Object reuse & exchange. In *Proceedings of Microsoft eScience Workshop 2008*, 2008.

[107] Martin Klein and Michael L. Nelson. A comparison of techniques for estimating IDF values to generate lexical signatures for the web. In *WIDM '08: Proceedings of the 10th ACM workshop on Web information and data management*, pages 39–46, 2008.

[108] Martin Klein and Michael L. Nelson. Revisiting lexical signatures to (re-)discover web pages. In *ECDL '08: Proceedings of the 12th European Conference on Research and Advanced Technology for Digital Libraries*, pages 371–382, 2008.

[109] Joan A. Smith and Michael L. Nelson. A quantitative evaluation of dissemination-time preservation metadata. In *ECDL '08: Proceedings of the 12th European Conference on Research and Advanced Technology for Digital Libraries*, pages 346–357, 2008.

[110] Frank McCown and Michael L. Nelson. Recovering a website's server components from the web infrastructure. In *JCDL '08: Proceedings of the 8th ACM/IEEE-CS Joint Conference on Digital Libraries*, pages 124–133, 2008.

[111] Frank McCown and Michael L. Nelson. Usage analysis of a public website reconstruction tool. In *JCDL '08: Proceedings of the 8th ACM/IEEE-CS Joint Conference on Digital Libraries*, pages 371–374, 2008.

[112] Charles L. Cartledge and Michael L. Nelson. Self-arranging preservation networks. In *JCDL '08: Proceedings of the 8th ACM/IEEE-CS Joint Conference on Digital Libraries*, pages 445–445, 2008.

[113] Frank McCown, Norou Diawara, and Michael L. Nelson. Factors affecting website reconstruction from the web infrastructure. In *JCDL '07: Proceedings of the 7th ACM/IEEE-CS Joint Conference on Digital Libraries*, pages 39–48, 2007.

[114] Frank McCown and Michael L. Nelson. Agreeing to disagree: search engines and their public interfaces. In *JCDL '07: Proceedings of the 7th ACM/IEEE-CS Joint Conference on Digital Libraries*, pages 309–318, 2007.

[115] Martin Klein, Michael L. Nelson, and Juliet Z. Pao. Augmenting OAI-PMH repository holdings using search engine APIs. In *JCDL '07: Proceedings of the 7th ACM/IEEE-CS Joint Conference on Digital Libraries*, page 486, 2007.

[116] Joan A. Smith and Michael L. Nelson. Generating best-effort preservation metadata for web resources at time of dissemination. In *JCDL '07: Proceedings of the 7th ACM/IEEE-CS Joint Conference on Digital Libraries*, pages 51–52, 2007.

[117] Frank McCown and Michael L. Nelson. Search engines and their public interfaces: which APIs are the most synchronized? In *WWW '07: Proceedings of the 16th international conference on World Wide Web*, pages 1197–1198, 2007.

[118] Frank McCown, Amine Benjelloun, and Michael L. Nelson. Brass: A queueing manager for Warrick. In *IWAW '07: Proceedings of the 7th International Web Archiving Workshop*, June 2007.

[119] Martin Klein and Michael L. Nelson. OAI-PMH Repository Enhancement for the NASA Langley Research Center Atmospheric Sciences Data Center. In *IWAW '07: Proceedings of the 7th International Web Archiving Workshop*, 2007.

[120] Joan A. Smith and Michael L. Nelson. CRATE: A Simple Model for Self-Describing Web Resources. In *IWAW '07: Proceedings of the 7th International Web Archiving Workshop*, 2007.

[121] Catherine Marshall, Frank McCown, and Michael L. Nelson. Evaluating personal archiving strategies for Internet-based in formation. In *Proceedings of IS&T Archiving 2007*, pages 151–156, May 2007. (Also available as arXiv:0704.3647v1).

[122] Frank McCown and Michael L. Nelson. Characterization of search engine caches. In *Proceedings of IS&T Archiving 2007*, pages 48–52, May 2007. (Also available as arXiv:cs/0703083v2).

[123] Frank McCown, Joan A. Smith, Michael L. Nelson, and Johan Bollen. Lazy preservation: Reconstructing websites by crawling the crawlers. In *WIDM '06: Proceedings of the 8th annual ACM international workshop on Web information and data management*, pages 67 − 74, 2006.

[124] Michael L. Nelson, Joan A. Smith, Ignacio Garcia del Campo, Herbert Van de Sompel, and Xiaoming Liu. Efficient, automatic web resource harvesting. In *WIDM '06: Proceedings of the 8th annual ACM international workshop on Web information and data management*, pages 43 − 50, 2006.

[125] Terry L. Harrison and Michael L. Nelson. Just-in-time recovery of missing web pages. In *HYPERTEXT '06: Proceedings of the Seventeenth ACM Conference on Hypertext and Hypermedia*, pages 157–168, 2006.

[126] Frank McCown and Michael L. Nelson. Evaluation of crawler policies for a web-repository crawler. In *HYPERTEXT '06: Proceedings of the Seventeenth ACM conference on Hypertext and Hypermedia*, pages 145–156, 2006.

[127] Joan A. Smith, Martin Klein, and Michael L. Nelson. Repository replication using NNTP and SMTP. In *ECDL '06: Proceedings of the 10th European Conference on Research and Advanced Technology for Digital Libraries*, pages 51 − 62, 2006. (Longer version available as arXiv cs.DL/0606008).

[128] Churngwei Chu, Walter E. Baskin, Juliet Z. Pao, and Michael L. Nelson. OAI-PMH Architecture for the NASA Langley Research Center Atmospheric Science Data Center. In *ECDL '06: Proceedings of the 10th European Conference on Research and Advanced Technology for Digital Libraries*, pages 524 − 527, 2006.

[129] Michael L. Nelson, Joan A. Smith, and Martin Klein. Repository replication using SMTP and NNTP. In *dg.o '06: Proceedings of the 2006 international conference on Digital government research*, pages 436–437, 2006.

[130] Frank McCown, Johan Bollen, and Michael L. Nelson. Evaluation of the NSDL and Google for Obtaining Pedagogical Resources. In *ECDL '05: Proceedings of the 9th European Conference on Research and Advanced Technology for Digital Libraries*, pages 344–355, 2005.

[131] Michael L. Nelson, Herbert Van de Sompel, Xiaoming Liu, Terry L. Harrison, and Nathan McFarland. mod_oai: An Apache module for metadata harvesting. In *ECDL '05: Proceedings of the 9th European Conference on Research and Advanced Technology for Digital Libraries*, pages 509–510, 2005. (Longer version available as arXiv cs.DL/0503069).

[132] Thomas Lutkenhouse, Johan Bollen, and Michael L. Nelson. Distributed, real-time computation of community preferences. In *HYPERTEXT '05: Proceedings of the Sixteenth ACM conference on Hypertext and Hypermedia*, pages 88–97, 2005.

[133] Frank McCown, Sheffan Chan, Michael L. Nelson, and Johan Bollen. The availability and persistence of web references in D-Lib Magazine. In *5th International Web Archiving Workshop (IWAW'05)*, September 2005.

[134] Daniel S. Swaney, Frank McCown, and Michael L. Nelson. Dynamic web file format transformations with grace. In *5th International Web Archiving Workshop (IWAW'05)*, September 2005.

[135] Michael L. Nelson and Johan Bollen. If you harvest arxiv.org, will they come? In *JCDL '05: Proceedings of the 5th ACM/IEEE-CS Joint Conference on Digital Libraries*, pages 393–393, 2005.

[136] Johan Bollen, Michael L. Nelson, Raquel Araujo, and Gary Geisler. Video recommendations for the open video project. In *JCDL '05: Proceedings of the 5th ACM/IEEE-CS Joint Conference on Digital Libraries*, pages 369–369, 2005.

[137] Kurt Maly, Michael L. Nelson, Mohammad Zubair, Ashraf Amrou, Sathish Kothamasa, Lan Wang, and Richard Luce. Enhancing Kepler usability and performance. In *ECDL '04: Proceedings of the 8th European Conference on Research and Advanced Technology for Digital Libraries*, pages 317–328, 2004.

[138] Kurt J. Maly, Michael L. Nelson, Mohammad Zubair, Ashraf Amrou, S. Kothasama, Lan Wang, and Richard Luce. Light-weight communal digital libraries. In *JCDL '04: Proceedings of the 4th ACM/IEEE-CS Joint Conference on Digital Libraries*, pages 237–238, 2004.

[139] Xiaoming Liu, Johan Bollen, Michael L. Nelson, Herbert Van de Sompel, Jeremy Hussell, Rick Luce, and Linn Marks. Toolkits for visualizing co-authorship graph. In *JCDL '04: Proceedings of the 4th ACM/IEEE-CS Joint Conference on Digital Libraries*, page 404, 2004.

[140] Michael L. Nelson, JoAnne R. Calhoun, and Calvin E. Mackey. The OAI-PMH NASA technical report server. In *JCDL '04: Proceedings of the 4th ACM/IEEE-CS Joint Conference on Digital Libraries*, page 400, 2004.

[141] Michael L. Nelson, Johan Bollen, JoAnne R. Calhoun, and Calvin E. Mackey. User evaluation of the nasa technical report server recommendation service. In *WIDM '04: Proceedings of the 6th annual ACM international workshop on Web information and data management*, pages 144–151, 2004.

[142] Hesham Anan, Kurt Maly, Michael L. Nelson, Mohammad Zubair, Xiaoming Liu, Jinsong Gao, Jianfeng Tang, and Yang Zhao. Archon: Building learning environments through extended digital library services. In *Proceedings of the 5th International Conference on New Educational Environments*, 2003.

[143] Kurt Maly, Mohammad Zubair, Michael Nelson, Xiaoming Liu, Hesham Anan, Jinsong Gao, Jianfeng Tang, and Yang Zhao. Archon - a digital library that federates physics collections. In *Proceedings of DC-2002: Metadata for e-Communities Supporting Diversity and Convergence*, 2002.

[144] Hesham Anan, Jianfeng Tang, Kurt Maly, Michael L. Nelson, Mohammad Zubair, and Zhao Yang. Challenges in Building Federation Services over Harvested Metadata. In *Proceedings of the International Conference on Asian Digital Libraries*, pages 602–614, 2003.

[145] Terry L. Harrison, Michael L. Nelson, and Mohammad Zubair. The Dienst-OAI gateway. In *JCDL '03: Proceedings of the 3rd ACM/IEEE-CS Joint Conference on Digital Libraries*, pages 309–311, 2003.

[146] Xiaoming Liu, Kurt Maly, Mohammad Zubair, and Michael L. Nelson. Repository synchronization in the oai framework. In *JCDL '03: Proceedings of the 3rd ACM/IEEE-CS Joint Conference on Digital Libraries*, pages 191–198, 2003.

[147] Xiaoming Liu, Kurt Maly, Mohammad Zubair, R. Tang, M.I. Padshah, George Roncaglia, JoAnne Rocker, Michael L. Nelson, William von Ofenheim, Richard E. Luce, et al. Technical Report Interchange through Synchronized OAI Caches. In *ECDL '02: Proceedings of the Sixth European Conference on Research and Advanced Technology for Digital Libraries*, pages 176–189, 2002.

[148] Johan Bollen and Michael L. Nelson. Adaptive networks of smart objects. In *31st IEEE International Conference on Parallel Processing, Workshop on Distributed Computing Architectures for Digital Libraries*, pages 487–494, 2002.

[149] Xiaoming Liu, Kurt Maly, Mohammad Zubair, and Michael L. Nelson. DP9: an OAI gateway service for web crawlers. In *JCDL '02: Proceedings of the 2nd ACM/IEEE-CS Joint Conference on Digital Libraries*, pages 283–284, 2002.

[150] Hesham Anan, Xiaoming Liu, Kurt Maly, M. Nelson, Mohammad Zubair, James C. French, Edward Fox, and P. Shivakumar. Preservation and transition of ncstrl using an oai-based architecture. In *JCDL '02: Proceedings of the 2nd ACM/IEEE-CS Joint Conference on Digital Libraries*, pages 181–182, 2002.

[151] Xiaoming Liu, Kurt Maly, Mohammad Zubair, and Michael L. Nelson. Arc: an oai service provider for cross-archive searching. In *JCDL '01: Proceedings of the 1st ACM/IEEE-CS Joint Conference on Digital Libraries*, pages 65–66, 2001.

[152] Michael L. Nelson, Gary Marchionini, Gary Geisler, and Meng Yang. A bucket architecture for the open video project. In *JCDL '01: Proceedings of the 1st ACM/IEEE-CS Joint Conference on Digital Libraries*, pages 310–311, 2001.

[153] Gary Geisler, Gary Marchionini, Michael L. Nelson, Richard Spinks, and Meng Yang. Interface Concepts for the Open Video Project. In *Proceedings of the Annual Meeting-American Society for Information Science*, pages 58–75, 2001.

[154] Mohammad Zubair, Kurt Maly, Imran Ameerally, and Michael L. Nelson. Dynamic construction of federated digital libraries. In *Proceedings of WWW9 Conference*, 2000.

[155] Michael L. Nelson, Kurt Maly, Mohammad Zubair, and Stewart N. T. Shen. SODA: Smart objects, dumb archives. In *ECDL '99: Proceedings of the Third European Conference on Research and Advanced Technology for Digital Libraries*, pages 453–464, 1999.

[156] Kurt Maly, Mohammad Zubair, Xiaoming Liu, Michael L. Nelson, and Steven Zeil. Structured Course Objects in a Digital Library. In *Proceedings of the Third International Symposium on Digital Libraries (ISDL 99), Tsukuba*, pages 89–96, 1999.

[157] Michael L. Nelson, Kurt Maly, Delwin Croom Jr., and Steven W. Robbins. Metadata and Buckets in the Smart Object, Dumb Archive (SODA) Model. In *Proceedings of the Third IEEE Meta-Data Conference*, 1999.

[158] Michael L. Nelson, Kurt Maly, and Stewart N. T. Shen. A multi-discipline, multi-genre digital library for research and education. In *Proceedings of ED-MEDIA 98*, 1998.

[159] Michael L. Nelson, Kurt Maly, Stewart N. T. Shen, and Mohammad Zubair. NCSTRL+: Adding multi-discipline and multi-genre support to the Dienst protocol using clusters and buckets. In *ADL '98: Proceedings of the Advances in Digital Libraries Conference*, pages 128–136, 1998.

[160] Michael L. Nelson, Kurt Maly, and Stewart N. T. Shen. Building multi-discipline digital libraries. In *DL '97: Proceedings of the second ACM international conference on Digital libraries*, pages 262–263, 1997.

[161] Michael L. Nelson and David E. Cordner. The workstation clustering environment at NASA Langley Research Center. In *Proceedings of the 3rd Annual Computational Aerosciences (CAS) Workshop*, 1996.

[162] 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 Widest Practicable Dissemination: The NASA Technical Report Server. In *Proceedings of AIAA Computers in Aerospace 10*, number AIAA-95-0964, 1995.

[163] Michael L. Nelson and David J. Bianco. The World Wide Web and technology transfer at NASA Langley Research Center. In *Second International World Wide Web Conference: Mosaic and the Web*, pages 701–710, 1994.

Magazines, Reports, and Other Publications

[1] Tarannum Zaki, Michael L. Nelson, and Michele C. Weigle. Extracting information from Twitter screenshots. Technical Report arXiv:2306.08236, 2023.

[2] Michael L. Nelson. Twitter DM videos are accessible to unauthenticated users. Technical Report arXiv:2212.05322, 2022.

[3] Caleb Bradford and Michael L. Nelson. Did they really tweet that? querying fact-checking sites and Politwoops to determine tweet misattribution. Technical Report arXiv:2211.09681, 2022.

[4] Shawn M. Jones, Michele C. Weigle, and Michael L. Nelson. Hypercane: Toolkit for summarizing large collections of archived webpages. *SIGWEB Newsletter*, Winter, 2022.

[5] 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. Technical Report arXiv:2104.14041, 2021.

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

[7] Shawn M. Jones, Alexander Nwala, Martin Klein, Michele C. Weigle, and Michael L. Nelson. SHARI – an integration of tools to visualize the story of the day. Technical Report arXiv:2008.00139, 2020.

[8] Shawn M. Jones, Martin Klein, Michele C. Weigle, and Michael L. Nelson. Mementoembed and raintale for web archive storytelling. Technical Report arXiv:2008.00137, 2020.

[9] Abigail Mabe, Dhruv Patel, Maheedhar Gunnam, Surbhi Shankar, Mat Kelly, Sawood Alam, Michael L. Nelson, and Michele C. Weigle. Visualizing webpage changes over time. Technical Report arXiv:2006.02487, 2020.

[10] Sawood Alam, Plinio Vargas, Michele C. Weigle, and Michael L. Nelson. Impact of http cookie violations in web archives. Technical Report arXiv:1906.07141, 2019.

[11] Sawood Alam, Michele C. Weigle, Michael L. Nelson, Martin Klein, and Herbert Van de Sompel. Supporting web archiving via web packaging. Technical Report arXiv:1906.07104, 2019.

[12] Mohamed Aturban, Michael L. Nelson, and Michele C. Weigle. Collecting 16K archived web pages from 17 public web archives. Technical Report arXiv:1905.03836, 2019.

[13] Mohamed Aturban, Michael L. Nelson, and Michele C. Weigle. Difficulties of timestamping archived web pages. Technical Report arXiv:1712.03140, 2017.

[14] Corren G. McCoy, Michael L. Nelson, and Michele C. Weigle. University Twitter engagement: Using Twitter followers to rank universities. Technical Report arXiv:1708.05790, 2017.

[15] Yasmin AlNoamany, Michele C. Weigle, and Michael L. Nelson. Stories from the past web. Technical Report arXiv:1705.06218, 2017.

[16] Herbert Van de Sompel, David S. H. Rosenthal, and Michael L. Nelson. Web infrastructure to support e-journal preservation (and more). Technical Report arXiv:1605.06154, 2016.

[17] Justin F. Brunelle, Michele C. Weigle, and Michael L. Nelson. Adapting the hypercube model to archive deferred representations and their descendants. Technical Report arXiv:1601.05142, 2016.

[18] Justin F. Brunelle, Krista Ferrante, Eliot Wilczek, Michele C. Weigle, and Michael L. Nelson. Leveraging Heritrix and the Wayback Machine on a corporate intranet: A case study on improving corporate archives. *D-Lib Magazine*, 22(1/2), 2016.

[19] Herbert Van de Sompel and Michael L. Nelson. Reminiscing about 15 years of interoperability efforts. *D-Lib Magazine*, 21(11/12), 2015.

[20] Shawn M. Jones and Michael L. Nelson. Avoiding spoilers in fan wikis of episodic fiction. Technical Report arXiv:1506.06279, 2015.

[21] Shawn M. Jones, Michael L. Nelson, Harihar Shankar, and Herbert Van de Sompel. Bringing web time travel to MediaWiki: An assessment of the Memento MediaWiki extension. Technical Report arXiv:1405.2330, 2014.

[22] Sawood Alam, Charles L. Cartledge, and Michael L. Nelson. Support for various HTTP methods on the Web. Technical Report arXiv:1405.2330, 2014.

[23] Martin Klein, Robert Sanderson, Herbert Van de Sompel, and Michael L. Nelson. Real-time notification for resource synchronization. Technical Report arXiv:1402.3305, 2014.

[24] Scott G. Ainsworth, Michael L. Nelson, and Herbert Van de Sompel. A framework for evaluation of composite memento temporal coherence. Technical Report arXiv:1402.0928, 2014.

[25] Mat Kelly, Justin F. Brunelle, Michele C. Weigle, and Michael L. Nelson. A method for identifying personalized representations in the archives. *D-Lib Magazine*, 19(11/12), 2013.

[26] Ahmed AlSum and Michael L. Nelson. ArcLink: Optimization Techniques to Build and Retrieve the Temporal Web Graph. Technical Report arXiv:1305.5959, 2013.

[27] Sawood Alam, Charles L. Cartledge, and Michael L. Nelson. HTTP Mailbox - Asynchronous RESTful Communication. Technical Report arXiv:1305.1992, 2013.

[28] Martin Klein, Robert Sanderson, Herbert Van de Sompel, Simeon Warner, Bernhard Haslhofer, Carl Lagoze, and Michael L. Nelson. A technical framework for resource synchronization. *D-Lib Magazine*, 19(1/2), 2013.

[29] Herbert Van de Sompel, Robert Sanderson, Martin Klein, Michael L. Nelson, Bernhard Haslhofer, Simeon Warner, and Carl Lagoze. A perspective on resource synchronization. *D-Lib Magazine*, 18(9/10), 2012.

[30] Michael L. Nelson. A Plan For Curating "Obsolete Data or Resources". Technical Report arXiv:1209.2664, 2012.

[31] Greg Szalkowski and Michael L. Nelson. The Performance of Betting Lines for Predicting the Outcome of NFL Games. Technical Report arXiv:1211.4000, 2012.

[32] Charles L. Cartledge and Michael L. Nelson. Connectivity Damage to a Graph by the Removal of an Edge or a Vertex. Technical Report arXiv:1103.3075, 2011.

[33] Jeb Ware, Martin Klein, and Michael L. Nelson. An Evaluation of Link Neighborhood Lexical Signatures to Rediscover Missing Web Pages. Technical Report arXiv:1102.0930, 2011.

[34] Jeffery L. Shipman, Martin Klein, and Michael L. Nelson. Using Web Page Titles to Rediscover Lost Web Pages. Technical Report arXiv:1002.2439, 2010.

[35] Herbert Van de Sompel, Michael L. Nelson, Robert Sanderson, Lyudmila L. Balakireva, Scott Ainsworth, and Harihar Shankar. Memento: Time Travel for the Web. Technical Report arXiv:0911.1112, 2009.

[36] Michael L. Nelson. Report on the 2009 ACM/IEEE Joint Conference on Digital Libraries. *D-Lib Magazine*, 15(7/8), 2009.

[37] Michael L. Nelson. Data-driven science: A new paradigm? *EDUCAUSE Review*, 44(4):6–7, 2009.

[38] Martin Klein and Michael L. Nelson. Evaluating methods to rediscover missing web pages from the web infrastructure. Technical Report arXiv:0907.2268, Old Dominion University Department of Computer Science, 2009.

[39] Michael L. Nelson, Martin Klein, and Manoranjan Magudamudi. Correlation of expert and search engine rankings. Technical Report arXiv:0809.2851, Old Dominion University Department of Computer Science, 2008.

[40] Carl Lagoze, Herbert Van de Sompel, Pete Johnston, Michael L. Nelson, Robert Sanderson, and Simeon Warner. Object Re-Use & Exchange: A Resource-Centric Approach. Technical Report arXiv:0804.2273, 2008.

[41] Joan A. Smith and Michael L. Nelson. Site Design Impact on Robots. *D-Lib Magazine*, 14(3/4), 2008.

[42] Joan A. Smith and Michael L. Nelson. Creating Preservation-Ready Web Resources. *D-Lib Magazine*, 14(1/2), 2008.

[43] G. Manepalli, H. Jerez, and Michael L. Nelson. FeDCOR: An Institutional CORDRA Registry. *D-Lib Magazine*, 12(2), 2006.

[44] Joan A. Smith, Frank McCown, and Michael L. Nelson. Observed web robot behavior on decaying web subsites. *D-Lib Magazine*, 12(2), 2006.

[45] Suchitra Manepalli, Giridhar Manepalli, and Michael L. Nelson. D2D: Digital Archive to MPEG-21 DIDL. Technical Report arXiv cs.DL/0602059, Old Dominion University Department of Computer Science, 2006.

[46] Michael L. Nelson. Final Report for the Development of the NASA Technical Report Server (NTRS). Technical Report NASA CR-2005-213515, NASA Langley Research Center, 2005.

[47] Michael L. Nelson, Johan Bollen, Giridhar Manepalli, and Rabia Haq. Archive ingest and handling test: The Old Dominion University approach. *D-Lib Magazine*, 11(12), 2005.

[48] Johan Bollen, Michael L. Nelson, Giridhar Manepalli, Giridhar Nandigam, and Suchitra Manepalli. Trend Analysis of the Digital Library Community. *D-Lib Magazine*, 11(1), 2005.

[49] Herbert Van de Sompel, Michael L. Nelson, Carl Lagoze, and Simeon Warner. Resource harvesting within the OAI-PMH framework. *D-Lib Magazine*, 10(12), 2004.

[50] Aravind Elango, Johan Bollen, and Michael L. Nelson. Dynamic linking of smart digital objects based on user navigation patterns. Technical Report arXiv cs.DL/0401029, Old Dominion University Department of Computer Science, 2004.

[51] Terry L. Harrison, Aravind Elango, Johan Bollen, and Michael L. Nelson. Initial Experiences Re-Exporting Duplicate and Similarity Computation with an OAI-PMH aggregator. Technical Report arXiv cs.DL/0401001, Old Dominion University Department of Computer Science, 2004.

[52] Simeon Warner and Michael L. Nelson. Report on the metadata harvesting workshop at JCDL 2003. *ACM SIGIR Forum*, 37(2):73–78, 2003.

[53] Michael L. Nelson. Report on the Third ACM/IEEE Joint Conference on Digital Libraries (JCDL). *D-Lib Magazine*, 9(7/8), 2003.

[54] Terry L. Harrison, Michael L. Nelson, and Mohammad Zubair. The Dienst OAI Gateway: A Preservation Gateway for a Legacy Protocol. Technical Report TR-2003-01, Old Dominion University Department of Computer Science, 2003.

[55] J.A. Rocker, G.J. Roncaglia, L.N. Heimerl, and Michael L. Nelson. The NASA Scientific and Technical Information (STI) Program's Implementation of Open Archives Initiative (OAI) for Data Interoperability and Data Exchange. In *Proceedings of 2002 Annual Special Libraries Conference*, 2002.

[56] Michael L. Nelson, Herbert Van de Sompel, and Carl Lagoze. Report on the 2nd Workshop on the Open Archives Initiative: Gaining Independence with e-Print Archives and OAI. *D-Lib Magazine*, 8(11), 2002.

[57] Michael L. Nelson and B. Danette Allen. Object persistence and availability in digital libraries. *D-Lib Magazine*, 8(1), 2002.

[58] Xiaoming Liu, Kurt Maly, Mohammad Zubair, and Michael L. Nelson. Arc-An OAI Service Provider for Digital Library Federation. *D-Lib Magazine*, 7(4), 2001.

[59] Michael L. Nelson, Brad Argue, Miles Efron, Sheila Denn, and Maria Cristina Pattuelli. A survey of complex object technologies for digital libraries. Technical Report NASA/TM-2001-211426, NASA Langley Research Center, 2001.

[60] Herbert Van de Sompel, Thomas Krichel, Michael L. Nelson, Patrick Hochstenbach, Victor M. Lyapunov, Kurt Maly, Mohammad Zubair, Mohamed Kholief, Xiaoming Liu, and Heath O'Connell. The UPS prototype: An experimental end-user service across e-print archives. *D-Lib Magazine*, 6(2), 2000.

[61] Michael L. Nelson. *Buckets: Smart Objects for Digital Libraries*. PhD thesis, Old Dominion University Department of Computer Science, 2000.

[62] R. T. Biedron, P. Mehrotra, M. L. Nelson, F. S. Preston, J. J. Rehder, J. L. Rogers, D. H. Rudy, J. Sobieszczanski-Sobieski, and O. O. Storaasli. Compute as Fast as the Engineers Can Think!—Ultrafast Computing Team Final Report. Technical Report NASA/TM-1999-209715, NASA Langley Research Center, 1999.

[63] Kurt Maly, Michael L. Nelson, and Mohammad Zubair. Smart objects, dumb archives: A user-centric, layered digital library framework. *D-Lib Magazine*, 5(3), 1999.

[64] Michael L. Nelson. A digital library for the National Advisory Committee for Aeronautics. Technical Report NASA/TM-1999-209127, NASA Langley Research Center, 1999.

[65] Kurt Maly, Mohammad Zubair, Stewart N. T. Shen, and Michael L. Nelson. Generalizing an existing digital library. Technical Report TR-99-01, Old Dominion University Department of Computer Science, 1999.

[66] Michael L. Nelson, Kurt Maly, Mohammad Zubair, and Stewart N. T. Shen. SODA: Smart Objects, Dumb Archives. Technical Report TR-98-09, Old Dominion University Department of Computer Science, 1998.

[67] Melissa E. Tiffany and Michael L. Nelson. Creating a Canonical Scientific and Technical Information Classification System for NCSTRL+. Technical Report NASA/TM-1998-208955, NASA Langley Research Center, 1998.

[68] Michael L. Nelson, Kurt Maly, and Mohammad Zubair. Interoperable Heterogeneous Digital Libraries. Technical Report TR-98-09, Old Dominion University Department of Computer Science, 1998.

[69] Michael L. Nelson, Kurt Maly, Stewart N. T. Shen, and Mohammad Zubair. Buckets: Aggregative, Intelligent Agents for Publishing. Technical Report NASA/TM-1998-208419, NASA Langley Research Center, 1998.

[70] Michael L. Nelson. Building multi-discipline, multi-format digital libraries using clusters and buckets. Master's thesis, Old Dominion University Department of Computer Science, 1997.

[71] Michael L. Nelson, Kurt Maly, and Stewart N. T. Shen. Buckets, Clusters, and Dienst. Technical Report NASA TM-112877, NASA Langley Research Center, 1997.

[72] Ming-Hokng Maa, Sandra L. Esler, and Michael L. Nelson. Lyceum: A multi-protocol digital library gateway. Technical Report NASA TM-112871, NASA Langley Research Center, 1997.

[73] Richard C. Tuey, Mary Collins, Pamela Caswell, Bob Haynes, Michael L. Nelson, Jeanne Holm, Lynn Buquo, Annette Tingle, Bill Cooper, and Roy Stiltner. NASAwide electronic publishing system-prototype STI electronic document distribution: Stage-4 evaluation report. Technical Report NASA TM-104630 (parts 1 and 2), NASA Langley Research Center, 1996.

[74] Michael L. Nelson. A survey of reverse engineering and program comprehension. Technical Report arXiv cs/0503068, Old Dominion University Department of Computer Science, 1996.

[75] Ming-Hokng Maa and Michael L. Nelson. Recent Improvements in the NASA Technical Report Server. Technical Report NASA TM-110209, NASA Langley Research Center, 1996.

[76] Michael L. Nelson and David J. Bianco. Accessing NASA Technology With the World Wide Web. *IEEE Aerospace and Electronic Systems Magazine*, 10(5):7–13, 1995.

[77] Donna G. Roper, Mary K. McCaskill, Scott D. Holland, Joanne L. Walsh, Michael L. Nelson, Susan L. Adkins, Manjula Y. Ambur, and Bryan A. Campbell. A Strategy for Electronic Dissemination of NASA Langley Technical Publications. Technical Report NASA TM-109172, NASA Langley Research Center, 1994.

[78] Michael L. Nelson, Gretchen L. Gottlich, and David J. Bianco. World Wide Web implementation of the Langley Technical Report Server. Technical Report NASA TM-109162, NASA Langley Research Center, 1994.

[79] Joseph A. Kaplan and Michael L. Nelson. A comparison of queueing, cluster and distributed computing systems. Technical Report NASA TM-109025 (Revision 1), NASA Langley Research Center, 1994.

[80] Michael L. Nelson and Gretchen L. Gottlich. Electronic document distribution: Design of the anonymous FTP Langley Technical Report Server. Technical Report NASA TM-4567, NASA Langley Research Center, 1994.

[81] Trey Arthur and Michael L. Nelson. Intel NX to PVM3.2 Message Passing Conversion Library. Technical Report NASA TM-109038, NASA Langley Research Center, 1993.

[82] 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	**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	**Brian Llinas**, Dissertation Topic: TBD.
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).
2023	**Emily Escamilla**, *Assessing the Prevalence and Archival Rate of URIs to Git Hosting Platforms in Scholarly Publications*, Initial employment: MITRE, (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	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 735/835	Web Archiving Forensics - F22, F20, S19
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	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 433/533	Web Security - F23, S22, S21
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

2023–2011	Theory and Practice of Digital Libraries (TPDL)
2021	IEEE International Conference on Multimedia Big Data 2021
2023–2002	ACM/IEEE Joint Conference on Digital Libraries (JCDL)
2023–2011	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)