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Department of Computer Science
Old Dominion University
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EXPERIENCE

Old Dominion University , Norfolk, VA <i>Professor of Computer Science</i>	July 2018 – present
Old Dominion University , Norfolk, VA <i>Associate Professor of Computer Science</i>	July 2012 – July 2018
Old Dominion University , Norfolk, VA <i>Assistant Professor of Computer Science</i>	July 2006 – July 2012
Clemson University , Clemson, SC <i>Assistant Professor of Computer Science</i>	August 2004 – July 2006
University of North Carolina , Chapel Hill, NC <i>Visiting Assistant Professor of Computer Science</i>	July 2003 – July 2004

EDUCATION

University of North Carolina, Chapel Hill, NC
Computer Science
Doctor of Philosophy, August 2003
“Investigating the Use of Synchronized Clocks in TCP Congestion Control”
Advisor: Kevin Jeffay
Master of Science, May 1998

Northeast Louisiana University, Monroe, LA
Computer Science, minor in Mathematics
Bachelor of Science, May 1996 (Summa Cum Laude)

RESEARCH INTERESTS

Web Science, Information Visualization, Social Media, Digital Preservation

STUDENTS ADVISED

- *PhD Advisor (2 current, 9 graduated)*: Corren McCoy, Travis Reid, Mohamed Aturban (Aug 2020), Mat Kelly (Aug 2019), Lulwah Alkwai (May 2019), Hassan Al-Maksousy (co-advised with Cong Wang, Dec 2018), Shahram Mohrehkesh (Aug 2015), Mohammad Almalag (May 2013), Hadi Arbabi (Aug 2011), Khaled Ibrahim (May 2011), Gongjun Yan (co-advised with Stephan Olariu, May 2010)
- *PhD Committee (3 current, 17 graduated)*: Ryan Florin, Kritika Garg, Shawn Jones, Sawood Alam (Dec 2020), Alexander Nwala (Aug 2020), Maha Abdelrasoul (Aug 2018), Abdulla Alasaadi (Dec 2017), Justin Brunelle (May 2016), Yasmin AlNoamany (Aug 2016), Mostafa Uddin (Aug 2016), Xianping Wang (Aug 2016), Hany SalahEldeen (Aug 2015), Charles Cartledge (Aug 2014), Puya Ghazizadeh (Aug 2014), Ahmed AlSum (May 2014), Samiur Arif (May 2014), Samy El Tawab (Aug 2012), Martin Klein (Aug 2011), Mahmoud Abuelela (May 2011), Filip Cuckov (ECE, Dec 2009)

- *MS Thesis (1 current, 5 graduated)*: Himarsha Jayanetti, John Berlin (May 2018), Mat Kelly (Aug 2012), Kalpesh Padia (Aug 2012), Prashanth Adurthi (Aug 2006, Clemson University), Pankaj Sharma (Aug 2006, Clemson University)
- *MS Thesis Committee (1 current, 7 graduated)*: Nauman Siddique, Aaron Walden (May 2016), Juliette Pardue (Aug 2015), Shawn Jones (May 2015), Alexander Nwala (May 2014), Vikas Ashok (May 2011), Rabia Haq (Dec 2008), Hadi Arbabi (Aug 2007)
- *MS Projects (1 current, 14 graduated)*: Abigail Mabe, Maheedhar Gunnam (May 2018), Hung Do (May 2017), Surbhi Shankar (May 2017), Erika Siregar (May 2017), Prasanna Sajjan (May 2016), Avinash Gosavi (Dec 2015), Bradley Dupont (Dec 2011), Spardha Jaiswal (May 2010), Rajat Singh (May 2009), Madhukesh Wali (May 2009), Sumanth Gelle (May 2008), Omkar Kasinadhuni (May 2008), Siva Tella (May 2008), Gyanesh Choudhary (Dec 2007)
- *Undergraduate Research (15 graduated)*: Abigail Mabe (BS May 2020), Dhruv Patel (BS May 2020), Erik Jensen (BS MSVE, May 2016), John Berlin (BS Dec 2015), Ander Rogers (BS May 2015), Aaron Walden (BS Aug 2014), Thomas Kennedy (BS May 2012), Greg Maslov (BS May 2012), Nickolas Betcher (Summer 2010 REU), Lazarus Boone (Summer 2010 REU), Nathan Brunelle (BS UVa, May 2011), Ian Iepson (BS Aug 2010), Colin Courtney (BS May 2010), Meredith Wilhelm (BS Dec 2008), Matt Crinklaw-Vogt (BS May 2008)

COURSES TAUGHT

- CS 312 - Internet Concepts (Fall 2020, Fall 2011, Fall 2010, Fall 2009, Fall 2008)
- CS 418/518 - Web Programming (Spring 2014, Fall 2012)
- CS 432/532 - Web Science (Spring 2021, Fall 2020, Spring 2020)
- CS 462/562 - Cybersecurity Fundamentals (Fall 2015, Fall 2013)
- CS 455/555 - Introduction to Networks and Communications (Spring 2013, Spring 2011, Fall 2009, Fall 2008, Fall 2007, Fall 2006)
- CS 625 - Data Visualization (Fall 2020, Fall 2019)
- CS 697 - Independent Study: Cloud Computing (Fall 2009)
- CS 791/891 - VANET Seminar (Fall 2007)
- CS 791/891 - Visualization Seminar (Fall 2015)
- CS 791/891 - Web Archiving Seminar (Fall 2017)
- CS 725/825 - Information Visualization (Spring 2021, Spring 2019, Spring 2018, Fall 2017, Spring 2017, Spring 2016, Spring 2015, Fall 2013)
- CS 795/895 - Applied Visual Analytics (Spring 2013)
- CS 795/895 - Information Visualization (Fall 2012, Fall 2011)
- CS 795/895 - Vehicular Networks (Fall 2010, Spring 2010, Spring 2008, Spring 2007)
- CS 796/896 - Visual Analytics Seminar (Spring 2011)
- CS 796/896 - Advanced Networking Seminar (Spring 2010)
- CS 800 - Research Methods (Spring 2021, Spring 2020)

- Clemson: CPSC 360 - Network Programming (Spring 2006, Fall 2005, Spring 2004)
- Clemson: CPSC 481 - Undergraduate Research (Spring 2006)
- Clemson: CPSC 826/825 - Internetworking (Fall 2005, Fall 2004)
- UNC: COMP 14 - Introduction to Programming in Java (Spring 2004, Fall 2003, Summer 2000)

PUBLICATIONS**BOOKS**

S. Olariu and **M.C. Weigle** (editors), *Vehicular Networks: From Theory to Practice*, CRC Press / Taylor & Francis, March 2009, ISBN 9781138116597, doi: 10.1201/9781420085891.

BOOK CHAPTERS

1. S. M. Jones, M. Klein, H. Van de Sompel, M. L. Nelson, and **M. C. Weigle**, Interoperability for Accessing Versions of Web Resources with the Memento Protocol, In *The Past Web*, Daniel Gomes, Ed., *to be published*, 2021.
2. S. Mohrehkesh, **M. C. Weigle** and S. K. Das, Energy Harvesting in Nanonetworks, In *Modeling, Methodologies and Tools for Molecular and Nano-scale Communications*. Junichi Suzuki, Tadashi Nakano, Michael John Moore, Eds., Springer International Publishing, pp. 319–347, 2017, doi: 10.1007/978-3-319-50688-3.
3. M. Almalag, **M.C. Weigle**, and S. Olariu, MAC Protocols for VANET, In *Mobile Hoc Networking: Cutting Edge Directions*, 2nd edition, Stefano Basagni, Marco Conti, Silvia Giordano, and Ivan Stojmenovic, Eds., John Wiley & Sons, pp. 599–618, 2013, doi: 10.1002/9781118511305.ch17
4. **M.C. Weigle**, S. Olariu, M. Abuelela and G. Yan, Use of Infrastructure in VANETs, In *Vehicular Networks: From Theory to Practice*, Stephan Olariu and Michele C. Weigle, Eds. CRC Press / Taylor & Francis, Boca Raton, FL, pp. 7.1–7.20, 2009, doi: 10.1201/9781420085891-c7.
5. G. Yan, K. Ibrahim and **M.C. Weigle**, Vehicular Network Simulators, In *Vehicular Networks: From Theory to Practice*, S. Olariu and M.C. Weigle, Eds. CRC Press / Taylor & Francis, Boca Raton, FL, pp. 13.1–13.22, 2009, doi: 10.1201/9781420085891-c13.

JOURNAL PUBLICATIONS

1. C. McCoy, M.L. Nelson, and **M.C. Weigle**, Mining the Web to Approximate University Rankings, *Information Discovery and Delivery*, 2019, DOI: 10.1108/IDD-05-2018-0014
2. L. Alkwai, M.L. Nelson, and **M.C. Weigle**, Comparing the Archival Rate of Arabic, English, Danish, and Korean Language Web Pages, *ACM Transactions on Information Systems (TOIS)*, Vol. 36, No. 1, July 2017, pp. 1:1-1:34, DOI: 10.1145/3041656 Impact Factor (2015): 0.977
3. S. Mohrehkesh, **M.C. Weigle**, and S. Das, Energy Harvesting in Electromagnetic Nanonetworks, *IEEE Computer*, Vol. 50, No. 2, February 2017, pp. 59-67, DOI: 10.1109/MC.2017.61 Impact Factor (2017): 1.115

4. Y. AlNoamany, **M.C. Weigle** and M.L. Nelson, Characteristics of Social Media Stories. What makes a good story?, *International Journal on Digital Libraries (IJDL)*, Vol. 17, No. 3, July 2016, pp. 239-256.
SJR (2015): 0.375 - *Scopus, not quite the same as impact factor*
5. Y. AlNoamany, **M.C. Weigle** and M.L. Nelson, Detecting Off-Topic Pages Within TimeMaps in Web Archives, *International Journal on Digital Libraries (IJDL)*, Vol. 17, No. 3, July 2016, pp. 203-221.
SJR (2015): 0.375
6. J.F. Brunelle, M. Kelly, **M.C. Weigle**, and M.L. Nelson, The Impact of JavaScript on Archivability, *International Journal on Digital Libraries (IJDL)*, Vol. 17, No. 2, June 2016.
SJR (2015): 0.375
7. J. F. Brunelle, M. Kelly, H. SalahEldeen, **M.C. Weigle**, and M. L. Nelson, Not All Mementos Are Created Equal: Measuring the Impact of Missing Resources, *International Journal on Digital Libraries (IJDL)*, Vol. 16, No. 3-4, September 2015.
SJR (2015): 0.375
8. D.B. Rawat, B.B. Bista, G. Yan and **M.C. Weigle**, Trust On the Security of Wireless Vehicular Ad-hoc Networking, *Ad Hoc and Sensor Wireless Networks*, Vol. 24, No. 3-4, 2015, pp. 283-305.
Impact Factor (2015): 0.587
9. S. Mohrehkesh, **M.C. Weigle**, and S. Das, DRIH-MAC: A Distributed Receiver-Initiated Harvesting-aware MAC for NanoNetworks, *IEEE Transactions on Molecular, Biological, and Multi-Scale Communications (T-MBMC)*, Vol. 1, No. 1, March 2015, pp. 97-110.
first issue of journal
10. S. Mohrehkesh and **M.C. Weigle**, Optimizing Energy Consumption in Terahertz Band Nanonetworks, *IEEE Journal on Selected Areas in Communications, Series on Molecular, Biological, and Multi-Scale Communications*, Vol. 32, No. 12, Dec 2014, pp. 2432-2441.
Impact Factor (2014): 3.453 (JSAC)
11. Y. AlNoamany, A. AlSum, **M.C. Weigle**, and M.L. Nelson, Who and What Links to the Internet Archive, *International Journal on Digital Libraries (IJDL)*, Vol. 14, No. 3-4, August 2014, pp. 101-115.
SJR (2015): 0.375
12. A. AlSum, **M.C. Weigle**, M.L. Nelson, and H. Van de Sompel, Profiling Web Archive Coverage for Top-Level Domain and Content Language, *International Journal on Digital Libraries (IJDL)*, Vol. 14, No. 3-4, August 2014, pp. 149-166.
SJR (2015): 0.375
13. S. Olariu, S. Mohrehkesh, X. Wang, and **M.C. Weigle**, On Aggregating Information in Actor Networks, *SIGMOBILE Mobile Computing Communications Review*, Vol. 18, No. 1, January 2014, pp. 85-96.
ResearchGate Journal Impact (2014): 1.49

14. G. Yan, D. Wen, S. Olariu, and **M.C. Weigle**, Security Challenges in Vehicular Cloud Computing, *IEEE Transactions on Intelligent Transportation Systems*, Vol. 14, No. 1, March 2013, pp. 284-294.
Impact Factor (2013): 2.472
15. **M.C. Weigle**, L. Cheng, J. Kaur, and V. Kulkarni, Generalized Stochastic Performance Models for Loss-based Congestion Control, *Computer Communications*, Vol. 33, No. 4, March 2010, pp. 513–525.
16. G. Yan, S. Olariu, and **M.C. Weigle**, Providing Location Security in Vehicular Ad-hoc Networks, *IEEE Wireless Communications, Special Issue on On-the-Road Communications*, Vol. 16, No. 6, December 2009, pp. 48–55.
17. R.R. Brooks, B. Pillai, M. Pirretti, and **M.C. Weigle**, Multicast Encryption Infrastructure for Security in Sensor Networks, *International Journal of Distributed Sensor Networks*, Vol. 5, No. 2, April 2009, pp. 139–157.
18. G. Yan, S. Olariu, and **M.C. Weigle**, Providing VANET Security Through Active Position Detection, *Computer Communications: Special Issue on Mobility Protocols for ITS/VANET*, Vol. 31, No. 12, July 2008, pp. 2883–2897.
19. R.R. Brooks, B. Pillai, **M.C. Weigle**, and M. Pirretti, Optimal Layout of Multicast Groups using Network Embedded Multicast Security in Ad Hoc Sensor Networks, *International Journal of Distributed Sensor Networks*, Vol. 3, No. 3, July 2007, pp. 273–287.
20. **M.C. Weigle**, K. Jeffay, and F.D. Smith, Quantifying the Effects of Recent Protocol Improvements to TCP: Impact on Web Performance, *Computer Communications*, Vol. 29, No. 15, September 2006, pp. 2853–2866.
21. **M.C. Weigle**, P. Adurthi, F. Hernandez-Campos, K. Jeffay, and F.D. Smith, Tmix: A Tool for Generating Realistic TCP Application Workloads in ns-2, *ACM Computer Communication Review*, Vol. 36, No. 3, July 2006, pp. 67–76.
22. **M.C. Weigle**, K. Jeffay, and F.D. Smith. Delay-Based Early Congestion Detection and Adaptation: Impact on Web Performance, *Computer Communications*, Vol. 28, No. 8, May 2005, pp. 837–850.

PEER-REVIEWED CONFERENCE PUBLICATIONS

1. L. Alkwai, M. L. Nelson, and **M. C. Weigle**, "Making Recommendations from Web Archives for "Lost" Web Pages," In *Proceedings of the ACM/IEEE Joint Conference on Digital Libraries (JCDL)*. August 2020.
2. J. Wu, M. R. U. Hoque, G. W. Reiske, **M. C. Weigle**, B. T. Bradshaw, H. D. Gaff, J. Li, and C. Kwan, "A Comparative Study of Sequential Tagging Methods for Domain Knowledge Entity Recognition in Biomedical Papers," In *Proceedings of the ACM/IEEE Joint Conference on Digital Libraries (JCDL)*. August 2020.
3. S. Jones, **M. C. Weigle**, and M. L. Nelson, Social Cards Probably Provide For Better Understanding Of Web Archive Collections, In *Proceedings of the ACM International Conference on Information and Knowledge Management (CIKM)*. Beijing, China, November 2019.

4. A. Nwala, **M. C. Weigle**, and M. L. Nelson, Using Micro-collections in Social Media to Generate Seeds for Web Archive Collections, In *Proceedings of the ACM/IEEE Joint Conference on Digital Libraries (JCDL)*. Urbana-Champaign, IL, June 2019.
5. S. Alam, **M. C. Weigle**, M. L. Nelson, F. Melo, D. Bicho and D. Gomes, MementoMap Framework for Flexible and Adaptive Web Archive Profiling, *Proceedings of the ACM/IEEE Joint Conference on Digital Libraries (JCDL)*. Urbana-Champaign, IL, June 2019.
6. M. Aturban, S. Alam, M. L. Nelson, and **M. C. Weigle**, Archive Assisted Archival Fixity Verification Framework, *Proceedings of the ACM/IEEE Joint Conference on Digital Libraries (JCDL)*. Urbana-Champaign, IL, June 2019.
7. H. Al-Maksousy, **M. C. Weigle**, and C. Wang, NNIDS: Neural Network based Intrusion Detection System, In *Proceedings of the IEEE International Symposium on Technologies for Homeland Security*. Woburn, MA, October 2018.
8. S. M. Jones, **M. C. Weigle**, and M. L. Nelson, The Off-Topic Memento Toolkit, In *Proceedings of the International Conference on Digital Preservation (iPres)*. Boston, MA, September 2018.
9. S. M. Jones, Alexander Nwala, **M. C. Weigle** and M. L. Nelson, The Many Shapes of Archive-It, In *Proceedings of the International Conference on Digital Preservation (iPres)*. Boston, MA, September 2018.
10. G. Atkins, A. Nwala, **M. C. Weigle** and M. L. Nelson, Measuring News Similarity Across Ten U.S. News Sites, In *Proceedings of the International Conference on Digital Preservation (iPres)*. Boston, MA, September 2018.
11. H. Al-Maksousy and **M. C. Weigle**, Hybrid intrusion detection system for worm attacks based on their network behavior, In *Proceedings of the EAI International Conference on Digital Forensics & Cyber Crime (ICDF2C)*. New Orleans, LA, September 2018, pp. 225-234.
Acceptance rate: 36%
12. A. Nwala, **M. C. Weigle** and M. L. Nelson, Bootstrapping Web Archive Collections from Social Media, In *Proceedings of ACM Hypertext (HT)*. Baltimore, MD, July 2018.
13. Sawood Alam, Mat Kelly, **M. C. Weigle** and M. L. Nelson, Unobtrusive and Extensible Archival Replay Banners Using Custom Elements (poster), In *Proceedings of the ACM/IEEE Joint Conference on Digital Libraries (JCDL)*. Fort Worth, TX, June 2018, pp. 319-320.
14. A. Nwala, **M. C. Weigle** and M. L. Nelson, Scraping SERPs for Archival Seeds: It Matters When You Start, In *Proceedings of the ACM/IEEE Joint Conference on Digital Libraries (JCDL)*. Fort Worth, TX, June 2018, pp. 263-272.
15. M. Kelly, M. L. Nelson and **M. C. Weigle**, A Framework for Aggregating Private and Public Web Archives, In *Proceedings of the ACM/IEEE Joint Conference on Digital Libraries (JCDL)*. Fort Worth, TX, June 2018, pp. 273-282.
16. M. Aturban, M. Kelly, S. Alam, J. Berlin, M. L. Nelson, and **M. C. Weigle**, ArchiveNow: Simplified, Extensible, Multi-Archive Preservation (poster), In *Proceedings of the ACM/IEEE Joint Conference on Digital Libraries (JCDL)*. Fort Worth, TX, June 2018, pp. 321-322, Best Poster Award.

17. Y. AlNoamany, **M. C. Weigle** and M. L. Nelson, Generating Stories from Archived Collections, In *Proceedings of the 9th International ACM Web Science Conference*. Troy, NY, June 2017, pp. 309–318.
Acceptance rate: 35% (30/85)
18. J. Brunelle, **M. C. Weigle** and M. L. Nelson, Archival Crawlers and JavaScript: Discover More Stuff but Crawl More Slowly, *Proceedings of the ACM/IEEE Joint Conference on Digital Libraries (JCDL)*. Toronto, Canada, June 2017, pp. 1–10.
Acceptance rate: 30% (23/77)
19. A. Nwala, M. L. Nelson, **M. C. Weigle**, A. Ziegler and A. Aizman, Local Memory Project: Providing Tools to Build Collections of Stories for Local Events from Local Sources, *Proceedings of the ACM/IEEE Joint Conference on Digital Libraries (JCDL)*. Toronto, Canada, June 2017, pp. 219–228.
Acceptance rate: 30% (23/77)
20. S. Alam, M. Kelly, **M. C. Weigle** and M. L. Nelson, Client-side Reconstruction of Composite Mementos Using ServiceWorker, *Proceedings of the ACM/IEEE Joint Conference on Digital Libraries (JCDL)*. Toronto, Canada, June 2017, pp. 237–240.
Acceptance rate: 32% (13/41) - short paper
21. M. Kelly, L. M. Alkwai, S. Alam, M. L. Nelson, **M. C. Weigle**, and H. Van de Sompel, Impact of URI Canonicalization on Memento Count, *Proceedings of the ACM/IEEE Joint Conference on Digital Libraries (JCDL)*. Toronto, Canada, June 2017, pp. 303–304.
Best Poster Award
22. J. A. Berlin, M. Kelly, M. L. Nelson, and **M. C. Weigle**, WAIL: Collection-Based Personal Web Archiving, *Proceedings of the ACM/IEEE Joint Conference on Digital Libraries (JCDL)*. Toronto, Canada, June 2017, pp. 340–341.
23. M. Kelly, S. Alam, M.L. Nelson and **M.C. Weigle**, InterPlanetary Wayback: Peer-To-Peer Permanence of Web Archives, In *Proceedings of the Theory and Practice of Digital Libraries Conference (TPDL)*. September 2016, pp. 411–416.
Acceptance rate: 37% (35/93) - short paper
24. J.F. Brunelle, **M.C. Weigle** and M.L. Nelson, Archiving Deferred Representations Using a Two-Tiered Crawling Approach, In *Proceedings of the International Conference on Digital Preservation (iPRES)*. November 2015.
25. M. Aturban, M.L. Nelson and **M.C. Weigle**, Quantifying Orphaned Annotations in Hypothes.is, In *Proceedings of the Theory and Practice of Digital Libraries Conference (TPDL)*. September 2015, pp. 15–27.
Acceptance rate: 44% (22/50)
26. Y. AlNoamany, M.L. Nelson and **M.C. Weigle**, Detecting Off-Topic Pages in Web Archives, In *Proceedings of the Theory and Practice of Digital Libraries Conference (TPDL)*. September 2015, pp. 225–237.
Acceptance rate: 44% (22/50)
27. Y. AlNoamany, **M.C. Weigle**, and M.L. Nelson, Characteristics of Social Media Stories, In *Proceedings of the Theory and Practice of Digital Libraries Conference (TPDL)*.

- September 2015, pp. 267–279.
Acceptance rate: 44% (22/50)
28. L. Alkwai, M.L. Nelson, and **M.C. Weigle**, How Well Are Arabic Websites Archived? In *Proceedings of the ACM/IEEE Joint Conference on Digital Libraries (JCDL)*. June 2015, pp. 223-232.
Acceptance rate: 30% (18/60)
Best Student Paper Award
 29. W. Jordan, M. Kelly, J.F. Brunelle, L. Vobrak, **M.C. Weigle**, and M.L. Nelson, Mobile Mink: Merging Mobile and Desktop Archived Webs, In *Proceedings of the ACM/IEEE Joint Conference on Digital Libraries (JCDL)*. June 2015, pp. 243-244.
Best Poster Award
 30. S. Mohrehkesh, A. Walden, X. Wang, **M.C. Weigle**, and S. Olariu, Towards Building Asset Registry in Emergency Response, In *Proceedings of the ACM Annual International Workshop on Mission-Oriented Wireless Sensor Networking (MiSeNet)*. Philadelphia, PA, October 2014.
Best Paper Award
 31. X. Wang, A. Walden, **M.C. Weigle**, and S. Olariu, Strategies for Sensor Data Aggregation in Support of Emergency Response, In *Proceedings of the Military Communications Conference (MILCOM)*. Baltimore, MD, October 2014.
 32. M. Ruffing, Y. He, J. Hallstrom, M. Kelly, S. Olariu, and **M.C. Weigle**, A Retasking Framework For Wireless Sensor Networks, In *Proceedings of the Military Communications Conference (MILCOM)*. Baltimore, MD, October 2014.
 33. J. Brunelle, M. Kelly, H. SalahEldeen, **M.C. Weigle** and M.L. Nelson, Not All Mementos Are Created Equal: Measuring the Impact of Missing Resources, In *Proceedings of the ACM/IEEE Joint Conference on Digital Libraries (JCDL)*. London, September 2014, pp. 321–330.
Acceptance rate: 28% (30/107)
Best Student Paper Award
 34. M. Kelly, M.L. Nelson and **M.C. Weigle**, The Archival Acid Test: Evaluating Archive Performance on Advanced HTML and JavaScript, In *Proceedings of the ACM/IEEE Joint Conference on Digital Libraries (JCDL)*. London, September 2014, pp. 25–28
Acceptance rate: 32% (24/75) - short paper
 35. M. Kelly, M.L. Nelson and **M.C. Weigle**, Mink: Integrating the Live and Archived Web Viewing Experience Using Web Browsers and Memento, In *Proceedings of the ACM/IEEE Joint Conference on Digital Libraries (JCDL)*. London, September 2014, pp. 469–470.
 36. S. Mohrehkesh and **M.C. Weigle**, RIH-MAC: Receiver-Initiated Harvesting-aware MAC for NanoNetworks, In *Proceedings of the ACM International Conference on Nanoscale Computing and Communication (NANOCOM)*. Atlanta, GA, May 2014.
 37. S. Mohrehkesh and **M.C. Weigle**, Optimizing Communication Energy Consumption in Perpetual Wireless Nanosensor Networks, In *Proceedings of the IEEE Globecom*, Atlanta, GA, December 2013.
Acceptance rate: 37% (841/2272)

38. M. Almalag, **M.C. Weigle**, S. Olariu and S. El-Tawab, A Modified TC-MAC Protocol for Multi-hop Cluster Communications in VANETs, In *Proceedings of IEEE Connected Vehicles and Expo (ICCVE)*. Las Vegas, December 2013.
39. S. Olariu, S. Mohrehkesh, and **M.C. Weigle**, Toward Aggregating Time-Discounted Information, In *Proceedings of the ACM Annual International Workshop on Mission-Oriented Wireless Sensor Networking (MiSeNet)*, Miami, FL, October 2013.
Best Paper Award
40. S. Mohrehkesh, S. Olariu, and **M.C. Weigle**, A Framework for Assessing the Quality of Event Detection in Sensor Networks, In *Proceedings of the ACM Annual International Workshop on Mission-Oriented Wireless Sensor Networking (MiSeNet)*, Miami, FL, October 2013.
41. M. Kelly, J. Brunelle, **M.C. Weigle**, and M.L. Nelson, On the Change in Archivability of Websites Over Time, In *Proceedings of the International Conference on Theory and Practice of Digital Libraries (TPDL)*, Valletta, Malta, September 2013, pp. 35–47.
Acceptance rate: 24% (24/100)
42. A. AlSum, **M.C. Weigle**, M.L. Nelson, and H. Van de Sompel, Profiling Web Archive Coverage for Top-Level Domain and Content Language, In *Proceedings of the International Conference on Theory and Practice of Digital Libraries (TPDL)*, Valletta, Malta, September 2013, pp. 60–71.
Acceptance rate: 24% (24/100)
43. Y. AlNoamany, **M.C. Weigle**, and M.L. Nelson, Who and What Links to the Internet Archive, In *Proceedings of the International Conference on Theory and Practice of Digital Libraries (TPDL)*, Valletta, Malta, September 2013, pp. 346–357.
Acceptance rate: 24% (24/100)
Best Student Paper Award
44. Y. AlNoamany, **M.C. Weigle**, and M.L. Nelson, Access Patterns for Robots and Humans in Web Archives, In *Proceedings of the ACM/IEEE Joint Conference on Digital Libraries (JCDL)*, Indianapolis, IN, July 2013, pp. 339–348.
Acceptance rate: 29% (28/97)
45. M. Almalag, S. Olariu, **M.C. Weigle**, and S. El-Tawab, Peer-to-Peer File Sharing in VANETs Using TC-MAC, In *Proceedings of the International Workshop on Mobile Peer-to-Peer Computing (MP2P)*, San Diego, CA, March 2013.
46. S. Mohrehkesh, T. Nadeem, and **M.C. Weigle**, Context-Aware Content Adaptation at the Access Point, In *Proceedings of the International Workshop on Context-Awareness for Self-Managing Systems (Casemans)*. Pittsburgh, PA, September 2012.
47. M. Kelly and **M.C. Weigle**, WARCreate - Create Wayback-Consumable WARC Files from Any Webpage, In *Proceedings of the ACM/IEEE Joint Conference on Digital Libraries (JCDL)*. Washington, DC, June 2012, pp. 437–438.
48. M. Almalag and **M.C. Weigle**, TDMA Cluster-based MAC for VANETs (TC-MAC), In *Proceedings of the IEEE Workshop on VANETs From Theory to Practice (VTP)*. San Francisco, CA, June 2012.
Acceptance rate: 36% (4/11)

49. **K. Padia**, Y. AlNoamany and **M.C. Weigle**, Visualizing Digital Collections at Archive-It, In *Proceedings of the ACM/IEEE Joint Conference on Digital Libraries (JCDL)*. Washington, DC, June 2012, pp. 15–18.
Acceptance rate: 29% (48/161) - short paper
50. S. Mohrehkesh, S. Ji, T. Nadeem, and **M.C. Weigle**, Demographic Prediction of Mobile User from Phone Usage, In *Proceedings of the Nokia Mobile Data Challenge Workshop*, Newcastle, UK, June 2012.
Acceptance rate: 16%
51. S. Ainsworth, A. AlSum, H. SalahEldeen, **M.C. Weigle**, and M.L. Nelson, How Much of the Web Is Archived?, In *Proceedings of the ACM/IEEE Joint Conference on Digital Libraries (JCDL)*, Ottawa, Canada, June 2011, pp. 133-136.
52. D.B. Rawat, B.B. Bista, G. Yan and **M.C. Weigle**, Securing Vehicular Ad-Hoc Networks Against Malicious Drivers: A Probabilistic Approach, In *Proceedings of the International Conference on Complex, Intelligent, and Software Intensive Systems (CISIS)*, Seoul, South Korea, June 2011.
53. H. Arbabi and **M.C. Weigle**, Monitoring Free-Flow Traffic using Vehicular Networks, In *Proceedings of the IEEE Intelligent Vehicular Communications System Workshop (IVCS)*, Las Vegas, NV, January 2011.
54. H. Arbabi and **M.C. Weigle**, Using DTMon to Monitor Transient Flow Traffic, In *Proceedings of the IEEE Vehicular Networking Conference (VNC)*, Jersey City, NJ, December 2010.
55. H. Arbabi and **M.C. Weigle**, Highway Mobility and Vehicular Ad-Hoc Networks in ns-3, In *Proceedings of the Winter Simulation Conference*. Baltimore, MD, December 2010.
56. M. Almalag and **M.C. Weigle**, Using Traffic Flow for Cluster Formation in Vehicular Ad-hoc Networks, In *Proceedings of the IEEE Workshop On User MObility and VEhicular Networks (ON-MOVE)*. Denver, CO, October 2010, pp. 631-636.
57. G. Yan, S. Olariu and **M.C. Weigle**, Cross-Layer Location Verification Enhancement in Vehicular Networks, In *Proceedings of the IEEE Intelligent Vehicles Symposium*. San Diego, June 2010.
58. G. Yan, W. Yang, **M.C. Weigle**, S. Olariu and D.B. Rawat, Cooperative Collision Warning through Mobility and Probability Prediction, In *Proceedings of the IEEE Intelligent Vehicles Symposium*. San Diego, June 2010.
59. H. Arbabi and **M.C. Weigle**, Using Vehicular Networks to Collect Common Traffic Data, In *Proceedings of the ACM International Workshop on Vehicular Internetworking (VANET)*. Beijing, September 2009, pp. 117–118.
60. D.B. Rawat, G. Yan, D.C. Popescu, **M.C. Weigle**, and S. Olariu, Dynamic Adaptation of Joint Transmission Power and Contention Window in VANET, In *Proceedings of the IEEE Vehicular Technology Conference - Fall*. Anchorage, Alaska, September 2009.
61. G. Yan, **M.C. Weigle**, and S. Olariu, A Novel Parking Service Using Wireless Networks, *Proceedings of the IEEE International Conference on Service Operations, Logistics and Informatics*. Chicago, July 2009.
Best Student Paper Award

62. K. Ibrahim, **M.C. Weigle**, and M. Abuelela, p-IVG: Probabilistic Inter-Vehicle Geocast for Dense Vehicular Networks, *Proceedings of the IEEE Vehicular Technology Conference - Spring*. Barcelona, Spain, April 2009.
Acceptance rate: 35%
63. K. Ibrahim, **M.C. Weigle**, and G. Yan, Light-Weight Laser-Aided Position Verification for CASCADE, *Proceedings of the International Conference on Wireless Access in Vehicular Environments (WAVE)*. Dearborn, MI, December 2008.
64. G. Yan, Y. Wang, **M.C. Weigle**, S. Olariu, and K. Ibrahim, WEHealth: A Secure and Privacy Preserving eHealth Using NOTICE, *Proceedings of the International Conference on Wireless Access in Vehicular Environments (WAVE)*. Dearborn, MI, December 2008.
65. K. Ibrahim and **M.C. Weigle**, CASCADE: Cluster-based Accurate Syntactic Compression of Aggregated Data in VANETs, *Proceedings of the IEEE International Workshop on Automotive Networking and Applications (AutoNet)*, New Orleans, LA, December 2008.
66. G. Yan, S. Olariu, **M.C. Weigle** and M. Abuelela, SmartParking: A Secure and Intelligent Parking System Using NOTICE, *Proceedings of the IEEE International Conference on Intelligent Transportation Systems*, Beijing, China, October 2008, pp 569–574.
67. K. Ibrahim and **M.C. Weigle**, Optimizing CASCADE Data Aggregation for VANETs, *Proceedings of the International Workshop on Mobile Vehicular Networks (MoVeNet)*, Atlanta, GA, September 2008, pp 724–729.
68. K. Ibrahim and **M.C. Weigle** Towards an Optimized and Secure CASCADE for Data Aggregation in VANETs, *Proceedings of the ACM International Workshop on Vehicular Internetworking (VANET)*, San Francisco, CA, September 2008, pp. 84–85.
69. M. Abuelela, S. Olariu, and **M.C. Weigle**, NOTICE: An Architecture for Notification of Traffic Incidents, *Proceedings of the IEEE Vehicular Technology Conference - Spring*, Singapore, May 2008, pp. 3001–3005.
Acceptance rate: 25%
70. K. Ibrahim and **M.C. Weigle**, ASH: Application-aware SWANS with Highway Mobility, *Proceedings of the IEEE INFOCOM Workshop on MOBILE Networking for Vehicular Environments (MOVE)*, Phoenix, AZ, April 2008.
71. S. Rizvi, S. Olariu, and **M.C. Weigle**, and M. Rizvi. A Novel Approach to Reduce Traffic Chaos in Emergency and Evacuation Scenarios, *Proceedings of the IEEE Vehicular Technology Conference - Fall*, Baltimore, MD, October 2007, pp. 1937–1941.
72. K. Ibrahim and **M.C. Weigle**. Accurate Data Aggregation for VANETs, *Proceedings of the ACM International Workshop on Vehicular Ad Hoc Networking (VANET)*, Montreal, Canada, September 2007, pp. 71–72.
73. G. Yan, G. Choudhary, **M.C. Weigle**, and S. Olariu. Providing VANET Security Through Active Position Detection. *Proceedings of the ACM International Workshop on Vehicular Ad Hoc Networking (VANET)*, Montreal, Canada, September 2007, pp. 73–74.

74. **M.C. Weigle** and S. Olariu, Intelligent Highway Infrastructure for Planned Evacuations, *Proceedings of the International Workshop on Research Challenges in Next Generation Networks for First Responders and Critical Infrastructures (NetCri)*, New Orleans, LA, April 2007, pp. 594–599.
Acceptance rate: 30%
75. S. Rizvi, S. Olariu, M. Rizvi, and **M.C. Weigle**, A Traffic Chaos Reduction Approach for Emergency Scenarios, *Proceedings of the International Workshop on Research Challenges in Next Generation Networks for First Responders and Critical Infrastructures (NetCri)*, New Orleans, LA, April 2007, pp. 576–578.
Acceptance rate: 30%
76. **M.C. Weigle**, Improving Confidence in Network Simulations, *Proceedings of the Winter Simulation Conference* (Invited Paper), Monterey, CA, December 2006, pp. 2188–2194.
77. **M.C. Weigle**, D. Vembar, and Z. Du, Assessing the Impact of Multiple Active Queue Management Routers, *Proceedings of Globecom*, San Francisco, CA, November 2006.
Acceptance rate: 40%
78. **M.C. Weigle** and M. Thottan, Impact of 802.11e EDCA on Mixed TCP-based Applications, *Proceedings of the International Wireless Internet Conference (WICON)*, Boston, MA, August 2006.
79. **M.C. Weigle**, Pankaj Sharma, and Jesse Freeman, Performance of Competing High-Speed TCP Flows, *Proceedings of IFIP Networking*, Coimbra, Portugal, May 2006, pp. 476–487.
Acceptance rate: 20%
80. J. Cao, W.S. Cleveland, Y. Gao, K. Jeffay, F.D. Smith, and **M.C. Weigle**. Stochastic Models for Generating Synthetic HTTP Source Traffic, *Proceedings of IEEE INFOCOM*. Hong Kong, March 2004, pp. 1547–1558.
Acceptance rate: 18%
81. **M.C. Weigle**, K. Jeffay, and F.D. Smith. Quantifying the Effects of Recent Protocol Improvements to Standards-Track TCP, *Proceedings of the IEEE/ACM International Symposium on Modeling, Analysis and Simulation of Computer Telecommunication Systems (MASCOTS)*. Orlando, FL, October 2003, pp. 226–229.
82. T. Hudson, **M.C. Weigle**, K. Jeffay, and R. Taylor, II. Experiments in Best-Effort Multimedia Networking for a Distributed Virtual Environment. *Proceedings of SPIE/ACM Multimedia Computing and Networking (MMCN)*. San Jose, CA, January 2001, pp. 88–98.
83. **M. Clark** and K. Jeffay. Application-Level Measurements of Performance on the vBNS. *Proceedings of the IEEE International Conference on Multimedia Computing and Systems*. Florence, Italy, June 1999, Vol. II, pp. 362–366.
84. P. Nee, K. Jeffay, **M. Clark**, and G. Danneels. A Two-Dimensional Audio Scaling Enhancement to an Internet Videoconferencing System. *Proceedings of the International Workshop on Audio-Visual Services over Packet Networks*. Aberdeen, Scotland, UK, September 1997, pp. 201–206.

MAGAZINE PUBLICATIONS, EDITORIALS

1. **M. C. Weigle**, On the Importance of Web Archiving, *SSRC Parameters*, September 2018, <https://parameters.ssrc.org/2018/09/on-the-importance-of-web-archiving/>
2. J.F. Brunelle, K. Ferrante, E. Wilczek, **M.C. Weigle**, and M.L. Nelson, Leveraging Heritrix and the Wayback Machine on a Corporate Intranet: A Case Study on Improving Corporate Archives, *D-Lib Magazine*, Vol. 22, No. 1/2, January/February 2016.
3. M. Kelly, J.F. Brunelle, **M.C. Weigle** and M.L. Nelson, A Method for Identifying Personalized Representations in the Archives, *D-Lib Magazine*, Vol. 19, No. 11/12, November/December 2013.
4. D.B. Rawat, G. Heijenk, **M.C. Weigle**, B. Bista, Y.-S. Chen, Special Issue of Ad Hoc Networks on Recent Advances in Vehicular Communications and Networking, editorial, *Ad Hoc Networks*, Vol. 11, No. 7, September 2013, pp. 1989-1991.
5. C.K. Toh, T. Higashino, J.-C. Cano and **M.C. Weigle**, Highlights: IEEE ITS Society Technical Committee on Mobile Communications Networks for ITS, *IEEE ITS Magazine*, Vol. 4, No. 1, 2012.

CONFERENCE POSTER/DEMO PRESENTATIONS (not in proceedings)

1. J. Berlin, M. Kelly, M. L. Nelson, and **M. C. Weigle**, Web Archiving Integration Layer (WAIL), Demo at Personal Digital Archiving, Stanford University, March 2017.
2. J. Pardue, M. Sen, C. Tsolakakis, R. Rankin, A. Khandelwal and **M. C. Weigle**, World-Vis: A Visualization Tool for World Data, Poster presented at IEEE VIS, Baltimore, MD, October 2016.
3. M. Kelly, M.L. Nelson, and **M.C. Weigle**, Graph-Based Navigation of a Box Office Prediction System, Poster presented at IEEE VIS, Atlanta, GA, October 2013.
4. S. Mohrehkesh, T. Nadeem and **M.C. Weigle**, Efficient Context-Aware Content Adaptation for Mobile Devices, Poster presented at IEEE INFOCOM. Orlando, FL, March 2012.
5. K. Ibrahim and **M.C. Weigle**, Securing CASCADE Data Aggregation for VANETs, Poster presented at the International Workshop on Mobile Vehicular Networks (MoVeNet), Atlanta, GA, September 2008.
6. S.R. Rizvi, **M.C. Weigle** and M.E. Rizvi, InVANETs for First Responders, Poster presented at ACM SIGCOMM, Seattle, WA, August 2008.
7. **M.C. Weigle**, K. Jeffay, and F.D. Smith. Sync-TCP: Using GPS Synchronized Clocks for Early Congestion Detection in TCP, Poster presented at ACM SIGCOMM. Stockholm, Sweden, August 2000.

TECHNICAL REPORTS

1. S. Jones, M. Klein, *M. C. Weigle*, and M. L. Nelson, MementoEmbed and Raintale for Web Archive Storytelling, Technical report arXiv:2008.00137, August 2020.
2. S. Jones, A. Nwala, M. Klein, *M. C. Weigle*, and M. L. Nelson, SHARI – An Integration of Tools to Visualize the Story of the Day, Technical report arXiv:2008.00139, August 2020.

3. A. Mabe, D. Patel, M. Gunnam, S. Shankar, M. Kelly, S. Alam, M. L. Nelson, and **M. C. Weigle**, TMVis: Visualizing Webpage Changes Over Time, Technical report arXiv:2006.02487, June 2020.
4. A. Nwala, **M. C. Weigle**, and M. L. Nelson, 365 Dots in 2019: Quantifying Attention of News Sources, Technical report arXiv:2003.09989, March 2020.
5. S. Alam, **M.C. Weigle**, M.L. Nelson, M. Klein and H. Van de Sompel, Supporting Web Archiving via Web Packaging, Technical report arXiv:1906.07104, June 2019.
6. M. Aturban, M.L. Nelson, **M.C. Weigle**, M. Klein and H. Van de Sompel, Collecting 16K archived web pages from 17 public web archives, Technical report arXiv:1905.03836, May 2019.
7. S. Jones, **M.C. Weigle**, and M.L. Nelson, Social Cards Probably Provide For Better Understanding Of Web Archive Collections, Technical report arXiv:1905.11342, May 2019.
8. M. Aturban, M. L. Nelson, and **M. C. Weigle**, Difficulties of Timestamping Archived Web Pages, Technical Report arXiv:1712.03140, December 2017.
9. C. G. McCoy, M. L. Nelson, and **M. C. Weigle**, University Twitter Engagement: Using Twitter Followers to Rank Universities, Technical Report arXiv:1708.05790, August 2017.
10. Y. AlNoamany, **M. C. Weigle** and M. L. Nelson, Stories From the Past Web, Technical report arxiv:1705.06218, May 2017.
11. M. Kelly, L. M. Alkwai, M. L. Nelson, **M. C. Weigle**, and H. Van de Sompel, Impact of URI Canonicalization on Memento Count, Technical report arXiv:1703.03302, March 2017.
12. J. F. Brunelle, **M. C. Weigle** and M. L. Nelson, Adapting the Hypercube Model to Archive Deferred Representations and Their Descendants, Technical report arXiv:1601.05142, January 2016.
13. M. Aturban, M. L. Nelson, and **M. C. Weigle**, Quantifying Orphaned Annotations in Hypothes.is, Technical report arXiv:1512.06195, December 2015.
14. J. F. Brunelle, **M. C. Weigle** and M. L. Nelson, Archiving Deferred Representations Using a Two-Tiered Crawling Approach, Technical report arXiv:1508.02315, August 2015.
15. Y. AlNoamany, A. AlSum, **M. C. Weigle** and M. L. Nelson, Who and What Links to the Internet Archive, Technical report arXiv:1309.4016, September 2013
16. Y. AlNoamany, **M. C. Weigle** and M. L. Nelson, Access Patterns for Robots and Humans in Web Archives, Technical report arXiv:1309.4009, September 2013.
17. A. AlSum, **M. C. Weigle**, M. L. Nelson and H. Van de Sompel, Profiling Web Archive Coverage for Top-Level Domain and Content Language, Technical report arXiv:1309.4008, September 2013.
18. M. Kelly, J. Brunelle, **M. C. Weigle** and M. L. Nelson, On the Change in Archivability of Websites Over Time, Technical report arXiv:1307.8067, July 2013.
19. S. Ainsworth, A. AlSum, H. SalahEldeen, **M. C. Weigle** and M. L. Nelson, How Much of the Web Is Archived?, Technical report arXiv:1212.6177, December 2012.

20. H. Arbabi and **M. C. Weigle**, Highway Mobility and Vehicular Ad-Hoc Networks in NS-3, Technical report arXiv:1004.4554, April 2010.

GRANTS AND AWARDS**FUNDED**

“Improving the Dark and Stormy Archives Framework by Summarizing the Collections of the National Library of Australia”

Co-PI, with Michael L. Nelson (PI)

Jan 2021 - Jan 2022, IIPC Discretionary Funding Program

\$50,000

“Visualizing Webpage Changes Over Time”

PI, with Michael L. Nelson, Deborah Kempe (Frick Art Reference Library and New York Art Resources Consortium), Pamela Graham (Columbia University Libraries), and Alex Thurman (Columbia University Libraries)

Oct 2017 – Mar 2020, NEH Digital Humanities Advancement Grant

\$75,000

“Towards a Web-Centric Approach for Capturing the Scholarly Record”

Co-PI, with Michael L. Nelson and Herbert Van de Sompel (LANL)

Apr 2016 – Mar 2020, Andrew Mellon Foundation

\$830,000

“Increasing the Value of Existing Web Archives”

Co-PI, with Michael L. Nelson

Sep 2015 – Aug 2019, NSF IIS (III 1526700)

\$481,780

“Combining Social Media Storytelling With Web Archives”

Co-PI, with Michael L. Nelson

May 2015 – April 2019, IMLS National Leadership Grant

\$468,618.

“Archive What I See Now: Bringing Institutional Web Archiving Tools to the Individual Researcher”

PI, with M. L. Nelson and L. Potts (Mich St.)

Sep 2014 – Aug 2017, National Endowment for the Humanities Digital Humanities Implementation Grant (HK-50181-14)

\$324,634.

“DriveSense - A Community Resource for Large-Scale Smartphone Based Traffic and Driving Activity Data”

Co-PI, with T. Nadeem

Aug 2014 – Jul 2015, NSF CRI (CNS 1405882)

\$99,926.

“Visualizing Digital Collections of Web Archives”

PI, with M. L. Nelson

Apr 2014 – Mar 2015, Columbia Libraries Web Archiving Incentive Program
\$21,610

“Tools for Managing Seed URIs”

Co-PI, with M. L. Nelson

Apr 2014 – Mar 2015, Columbia Libraries Web Archiving Incentive Program
\$21,610

“Archive What I See Now: Bringing Institutional Web Archiving Tools to the Individual Researcher”,

PI, with Michael L. Nelson

May 2013 – Dec 2014, National Endowment for the Humanities Digital Humanities Start-Up Grant (HD-51670-13)
\$57,892.

“Collaborative Research:CSR:Small:An Architecture for the Emergency Re-tasking of Wireless Sensor Networks (ALERT)”

PI, with Stephan Olariu and Jason Hallstrom (Clemson)

Aug 2011 – July 2016, NSF (CNS 1116238)

\$358,549 to ODU (total: \$440,000)

REU supplement, CNS 1116238, July 2013, \$16,000

REU supplement, CNS 1116238, July 2014, \$16,000

“Identifying and Archiving Culturally Important Conversations in the Social Web”

Co-PI, with Michael L. Nelson (CS), Kathie Gossett (English, CeME Lab), and Liza Potts (English, CeME Lab)

Jan 2011 – Jun 2011, ODU Office of Research, Multidisciplinary Seed Grant
\$54,000.

“Tutorials for Computer Aided Design Methodologies in Computer Engineering”

With Filip Cuckov (ECE), Lee Belfore II (ECE), and Amy Adcock (STEM Educational and Professional Studies)

2011 – 2012, ODU Faculty Innovator Grant \$2,600.

“NeTS-WN: An Architecture for the Notification of Traffic Incidents and Congestion (NOTICE)”

PI, with Stephan Olariu (CS) and Asad Khattak (Civil and Environmental Engineering)

Aug 2007 – Aug 2011, NSF (CNS 0721586)

\$400,000

REU supplement, CNS 0832311, May 2008, \$6000

REU supplement, CNS 0939451, July 2009, \$8000

“Collaborative Research: CRI-CRD: Synthetic Traffic Generation Tools and Resources: A Community Resource for Experimental Networking Research”

PI, with Kevin Jeffay (UNC), F.D. Smith (UNC), Paul Barford (Wisconsin), Amin Vahdat (UCSD)

Aug 2007 – Aug 2011, NSF (CNS 0709058)

\$201,794 to ODU (total: \$799,743)

REU supplement, CNS 0830334, May 2008, \$6000

REU supplement, CNS 0709058, July 2010, \$8175

“Exploring the Use of Mobile Ad-Hoc Networks for Inter-Vehicular Communication”

Nov 2005 – Nov 2006, Clemson University Research Grant Committee

\$2,979

RECENT INVITED TALKS

“WS-DL’s Work towards Enabling Personal Use of Web Archives”, Library of Congress, Washington, DC, December 18, 2018.

Keynote Address - “Enabling Personal Use of Web Archives”, Web Archiving and Digital Libraries Workshop, Fort Worth, TX, June 6, 2018.

“Visualizing Webpage Changes Over Time”, Lightning Talk, NEH ODH Project Directors’ Meeting, Washington, DC, February 9, 2018.

“Tools for Managing Seed URLs”, Invited Talk, Columbia University Web Archiving Collaboration: New Tools and Models Workshop, New York, June 4, 2015.

“What’s Grad School All About?”, Invited Talk, Capital Region Celebration of Women in Computing (CAPWIC), Harrisonburg, VA, February 28, 2015.

“Tools for Managing the Past Web,” Graduate Seminar, ODU Department of Electrical and Computing Engineering, Norfolk, VA, February 20, 2015.

“Tools for Managing the Past Web”, Archive-It Partners Meeting, Montgomery, AL, November 18, 2014.

“Telling Stories with Web Archives”, Invited Talk, Department of Computer Science, University of North Carolina, Chapel Hill, NC, October 27, 2014.

“Archive What I See Now: Bringing Institutional Web Archiving Tools to the Individual Researcher”, Lightning Talk, NEH ODH Project Directors’ Meeting, Washington, DC, September 17, 2014.

Keynote Address - “Telling Stories with Web Archives”, Southeast Women in Computing Conference, Lake Guntersville, AL, November 15-17, 2013. (Part of the CRA-W Distinguished Lecture Series)

“Communications and Energy-Harvesting in Nanosensor Networks”, BioCom²: NSF Workshop on Biological Computations and Communications, Boston, MA, November 9, 2012.

“Information Visualization - Visualizing Digital Collections at Archive-It”, Faculty Lightning Talk, Grace Hopper Celebration of Women in Computing, Baltimore, MD, October 4, 2012.

“Networks, Vehicles, and the Web”, Systems Seminar, Department of Computer Science, University of North Carolina at Chapel Hill, April 8, 2011.

PROFESSIONAL ACTIVITIES

Editorial Board: *Journal of the Association for Information Science and Technology (JASIST)* (2016-present); *International Journal on Digital Libraries (IJDL)* (2018-present)

Guest Editor: *International Journal on Digital Libraries*, Special Issue (2020); *Ad Hoc Networks*, Special Issue on Recent Advances in Vehicular Communications and Networking (Volume 11, Issue 7, Sep 2013)

Advisory Board Member: “Archives Unleashed”, Ian Milligan (University of Waterloo), Jimmy Lin (University of Waterloo), Nick Ruest (York University), July 2017 – June 2020, Andrew W. Mellon Foundation, \$461,982.

Technical Committee Chair: IEEE ITS Society Technical Committee on Mobile Communication Networks (Co-Chair 2011-2014)

Steering Committee: ACM/IEEE Joint Conference on Digital Libraries (2020-present); International Workshop on Intelligent Vehicular Networks (InVeNET) (2009-2010)

Technical Program Committee (TPC) Chair: ACM/IEEE Joint Conference on Digital Libraries (Co-Chair 2016); IEEE Vehicular Networks and Applications Workshop (Vehi-Mobi) (Vice-Chair 2010); IEEE Workshop on Networking for Intelligent Vehicles and Infrastructures (NiVi) (Vice-Chair 2009)

Workshop Organizer: DriveSense: NSF Workshop on Large-Scale Traffic and Driving Activity Data (Co-Chair 2014)

Workshops Chair: ACM/IEEE Joint Conference on Digital Libraries (Co-Chair 2017)

Panels Chair: ACM/IEEE Joint Conference on Digital Libraries (Co-Chair 2019)

Senior Technical Program Committee Member: ACM/IEEE-CS Joint Conference on Digital Libraries (JCDL) (2021, 2020, 2019, 2018, 2017)

Technical Program Committee Member: International Conference on Theory and Practice of Digital Libraries (TPDL) (2021, 2020, 2019, 2018, 2017); Web Archiving and Digital Libraries Workshop (2020, 2019); ACM/IEEE Joint Conference on Digital Libraries (JCDL) (2017, 2016, 2015, 2014, 2012); ACM International Conference on Nanoscale Computing and Communication (NANOCOM) (2014); Grace Hopper Celebration of Women in Computing, student posters (2013); International Wireless Communications and Mobile Computing Conference, Mobile Computing Symposium (2011); IEEE PIMRC track on Intelligent Transportation Networks (2011); ACM Workshop on Vehicular Internetworking (VANET) (2010, 2009, 2008); Networking Networking Women Workshop (2010); IEEE Workshop on Intelligent Vehicular Communication Systems (IVCS) (2010, 2009); IEEE International Workshop on Vehicular Networking (VON) (2009, 2008); International Workshop on Network Simulation Tools (NSTools) (2009); IEEE International Workshop on Network Security and Privacy (NSP) (2008); International Workshop on Collaboration and Cognition in Next Generation Networks (CoNGN) (2008); International Workshop on Wireless Vehicular Networking Technology (VINT) (2008); IEEE Workshop on Mission-Critical Networking (2008)

Doctoral Consortium Mentor: ACM/IEEE Joint Conference on Digital Libraries (2018, 2017, 2016)

Session Chair: ACM Workshop on Vehicular Internetworking (VANET) (2008); Workshop on Research Challenges in Next Generation Networks for First Responders and Critical Infrastructures (2007); Winter Simulation Conference (2006)

Invited Panelist: “ODH at Ten” panel at the National Endowment for the Humanities Office of Digital Humanities Project Directors’ Meeting (2018), “Architectures for Next Generation Networks for Critical Infrastructure” at the International Workshop on Research Challenges in Next Generation Networks for First Responders and Critical Infrastructures - NetCri (2007)

Proposal Reviewer: Natural Sciences and Engineering Research Council of Canada (2020, 2019); National Science Foundation (2014, 2008); Province of British Columbia Natural Resources and Applied Sciences (NRAS) Endowment (2010); Austrian Science Fund (2009); Israel Science Foundation (2007)

Reviewer (not including TPC or Editorial Board membership): *ACM Transactions on Internet Technology* (2020); *Visual Thinking for Design*, Second Edition (2020); *International Journal on Digital Libraries* (2018); *Internet Histories* (2017); *Environmental Modelling and Software* (2017, 2015); International Conference on Theory and Practice of Digital Libraries (TPDL) (2016); IEEE VIS - VAST Challenge (2016, 2015); *Future Internet* (2014); *Modeling, Methodologies and Tools for Molecular and Nano-scale Communications* book (2014); *IEEE Transactions on Communications* (2014); *IEEE Transactions on Mobile Computing* (2014, 2009); *IEEE Transactions on Intelligent Transportation Systems* (2014, 2011, 2009); *Journal of Parallel and Distributed Computing* (2014); IEEE International Conference on Computing, Communication and Networking Technologies (2014); *IEEE Transactions on Parallel and Distributed Systems* (2013, 2011, 2010); *IEEE Transactions on Vehicular Technology* (2013, 2012, 2011, 2009, 2008); IEEE International Conference on Mobile Ad hoc and Sensor Systems (MASS) (2012); *Simulation Modeling Practice and Theory* (2012); IEEE INFOCOM (2011, 2007, 2006, 2005, 2004); *Computer Networks* (2011); *World Wide Web Journal* (2011); *Telecommunications Systems Journal* (2011); *Wireless Networks* (2011); *IEEE Journal on Selected Areas in Communications—Special Issue Vehicular Communications and Networks* (2010); *Sensors* (2010); *Ad Hoc Networks* (2010, 2009); IEEE Milcom (2010); *Computer Communications* (2010, 2009, 2007, 2006); *IEEE Wireless Communications Magazine* (2009); IEEE Consumer Communications and Networking Conference (2009); *Journal on Intelligent Transportation Systems* (2009, 2008); IEEE Vehicular Technology Conference (2009, 2008); *Pervasive and Mobile Computing* (2008); *IEEE Communications Letters* (2007); IEEE PIMRC (2007); *ACM Transactions on Modeling and Simulation* (2006); *ACM Computer Communications Review* (2006); *International Journal of Distributed Sensor Networks* (2006); *Computer Networking: A Top-Down Approach*, Fourth Edition (2006); International Conference on Distributed Computing and Sensor Systems (2005); ACM Symposium on Applied Computing (2004); *Java Programming: From Problem Analysis to Program Design*, Second Edition (2004)

University Service: Executive Director, Virginia Institute for Space and Autonomy Search Committee (2019); Cybersecurity Center Director and Faculty Search Committee (2015), Canvas CMS pilot faculty (2015), Psychology Chair Search Committee (2012), ODU Library Committee (2007-2013), ODU Academic Integrity Inquiry Committee (2009) Member of ODU Women’s Caucus, childcare subcommittee (2012-2015)

Departmental Service: Faculty Advisor, ACM-W student group (2013-present); Faculty Representative, NCWIT Academic Alliance (2014-present); Graduate Program Director

(2013-2019)

Committees: CS Faculty Search (2020, 2018, 2017, 2011), CS Chair Search (2017, 2008), Facilities Search (2013), Richard Cheng Chair Search (2010, 2007), Graduate Studies (2007-present)

Member: ACM (Senior Member), ACM-W, IEEE (Senior Member)

HONORS AND AWARDS

Awards: ODU Division of Student Engagement and Enrollment Services Shining Star Award (Spring 2016, Fall 2015, Fall 2014, Spring 2011), ODU College of Sciences Distinguished Teaching Award for Tenured Faculty (2013-2014)

Best Paper Awards:

1. Best Student Paper Award - ACM/IEEE Joint Conference on Digital Libraries (JCDL), June 2015
2. Best Paper Award - ACM Annual International Workshop on Mission-Oriented Wireless Sensor Networking (MiSeNet), October 2014
3. Best Student Paper Award - ACM/IEEE Joint Conference on Digital Libraries (JCDL), September 2014
4. Best Paper Award - ACM Annual International Workshop on Mission-Oriented Wireless Sensor Networking (MiSeNet), October 2013
5. Best Student Paper Award - International Conference on Theory and Practice of Digital Libraries (TPDL), September 2013
6. Best Student Paper Award - IEEE International Conference on Service Operations, Logistics and Informatics, July 2009

Selected Participant: TRUST's Women's Institute for Summer Enrichment Program (2007)

Fellowships: UNC Department of Computer Science Alumni Fellowship (2002–2003); NSF Graduate Research Fellowship (1996–1999); Microsoft UPE Scholarship (1996); Phi Kappa Phi Fellowship, honorable mention (1996)

Member: Phi Kappa Phi (1996); Upsilon Pi Epsilon, computing sciences honors (1995)