

Emily Maemura

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Academic Appointments

Assistant Professor, University of Illinois Urbana-Champaign, School of Information Sciences, 2022–Present
Librarian, Digital Strategy Research, Toronto Metropolitan University, 2020–2021
Librarian, Research Data Management Support and Liaison for the Faculty of Engineering and Architectural Science, Toronto Metropolitan University, 2019–2020
Teaching Assistant and Instructor, University of Toronto, Faculty of Information and Institute of Communication, Culture, Information and Technology, 2014–2021

Education

Ph.D., University of Toronto, Faculty of Information, 2021
Dissertation: *Data Here and There: Studying Web Archives Research Infrastructures in Danish and Canadian Settings*.
Committee: Patrick Keilty, Beth Coleman, Costis Dallas
Master of Information, University of Toronto, Faculty of Information, Specialization in Information Systems & Design, Collaborative Program in Knowledge Media Design, 2014
Bachelor of Architectural Studies, University of Waterloo, School of Architecture, 2007

Peer-reviewed Articles

Maemura, E. (2025). Conceptualizing aggregate-level description in web archives. *Archival Science*, 25(6), 1–20. doi:10.1007/s10502-025-09475-z
Maemura, E. (2023). Sorting URLs out: Seeing the web through infrastructural inversion of archival crawling. *Internet Histories*, 7(4), 386–401. doi:10.1080/24701475.2023.2258697
Maemura, E. (2023). All WARC and no playback: The materialities of data-centered web archives research. *Big Data & Society*, 10(1), 20539517231163172. doi:10.1177/20539517231163172
Maemura, E. (2022). Towards an Infrastructural Description of Archived Web Data. *WARCnet Papers*.
Ogden, J., & **Maemura, E.** (2021). ‘Go fish’: Conceptualising the challenges of engaging national web archives for digital research. *International Journal of Digital Humanities*. doi:10.1007/s42803-021-00032-5.

- Becker, C., **Maemura, E.**, & Moles, N. (2020). The Design and Use of Assessment Frameworks in Digital Curation. *Journal of the Association for Information Science and Technology*, 71(1), 55–68.
- Maemura, E.**, Worby, N., Milligan, I., & Becker, C. (2018). If These Crawls Could Talk: Studying and Documenting Web Archives Provenance. *Journal of the Association for Information Science and Technology*, 69(10), 1223–1233.
- Maemura, E.**, Moles, N., & Becker, C. (2017). Organizational assessment frameworks for digital preservation: A literature review and mapping. *Journal of the Association for Information Science and Technology*, 68(7), 1619–1637.

Peer-reviewed Conference Proceedings (full paper reviewed)

- Maemura, E.** (2025). What is a Data Document? Analyzing Four Emerging Data Documentation Frameworks in AI/ML. In *Proceedings of the 88th Annual Meeting of the Association for Information Science and Technology*, Washington, DC, November 2025.
- Maemura, E.**, & Wagner, T. L. (2025). ‘Everyone has their reasons for curating the data they have decided to keep’: A thematic analysis of data hoarding as digital curation practice. *Proceedings of iConference 2025 published in Information Research an International Electronic Journal*, 30(iConf). doi:10.47989/ir30iConf47197
 nominated for best short paper
- Maemura, E.** (2018). What’s Cached is Prologue: Reviewing Web Archives Research Towards a Model for Scholarly Use. In *Proceedings of the 81st Annual Meeting of the Association for Information Science and Technology*, Vancouver, BC, November 2018.
- Maemura, E.**, Becker, C., & Milligan, I. (2016). Understanding computational web archives research methods using research objects. In *Proceedings of the 2016 IEEE International Conference on Big Data (Big Data)*, Washington, DC, December 2016
- Maemura, E.**, Moles, N., & Becker, C. (2015). A Survey of Organizational Assessment Frameworks in Digital Preservation. In *Proceedings of the 12th International Conference on Digital Preservation*, Chapel Hill, NC, November 2015.
- Maemura, E.**, Turner, D., Perrie, J., Lyons, K., & Stroulia, E. (2014). GRAND Multidisciplinarity: The Way We Are. In *Proceedings of the 5th Annual Conference of the Graphics, Animation and New Media (GRAND) Network of Centres of Excellence*, Ottawa, ON, May 2014.

Refereed Abstract Presentations

- Maemura, E.** & MacKinnon, K. (2025). *Infrastructural Consent: The ethics and politics of embedded technoscience objects on the web*. Presentation at 4S 2025, Seattle, WA, September 2025.
- MacKinnon, K. & **Maemura, E.** (2025). *Robots.txt and A History of Consent for Web Data Capture*. Presentation at RESAW Conference, Siegen, Germany, June 2025.

- MacKinnon, K. & **Maemura, E.** (2024). *From ia_archiver to OpenAI: The Pasts and Futures of Automated Data Scrapers*. Presentation at Association of Internet Researchers Conference, Sheffield, UK, October 2024.
- Walker, D. & **Maemura, E.** (2024). *Slow-scan event archives*. Presentation at DIY Methods 2024, remote-participation zine-based conference, September 2024.
- Paßman, J., Gerzen, L., Schories, M., Ogden, J., **Maemura, E.** & Mackinnon, K. (2023). *Web Histories in the Making: Web Archives & the Logics of Practice*. Presentation at Association of Internet Researchers Conference, Philadelphia, PA, October 2023.
- Maemura, E.** & Byrne, H. (2023). *Describing Collections with Datasheets for Datasets*. Presentation at RESAW Conference, Marseille, France, June 2023.
- Maemura, E.** (2023). *Web archiving practices and the material logics of collection and discovery*. Presentation at RESAW Conference, Marseille, France, June 2023.
- Maemura, E.** (2022). *Developing Datasheets for Archived Web Datasets*. Presentation at WARCnet Closing Conference, Aarhus, Denmark, October 2022.
- Maemura, E.** (2021). *Data Practices And Sociotechnical Judgments Of Web Archives Infrastructures*. Presentation at 4S 2021, Toronto (online), October 2021.
- Maemura, E.** (2021). *Embracing Infrastructural Approaches in Web Archives Research*. Presentation at RESAW 2021, Luxembourg (online), June 2021.
- Ogden, J., & **Maemura, E.** (2020). *A tale of two web archives: Challenges of engaging web archival infrastructures for research*. Presentation at DH2020, Ottawa, ON (online), July 2020.
- Ogden, J., & **Maemura, E.** (2020). *A tale of two web archives: Challenges of engaging web archival infrastructures for research*. Presentation at Engaging with Web Archives: ‘Opportunities, Challenges and Potentialities’, (EWA20), Kildare, Ireland (online), September 2020.
- Maemura, E.**, Worby, N., Becker, C., & Milligan, I. (2017). *Origin stories: Documentation for Web Archives Provenance*. Presented at the International Internet Preservation Consortium Web Archiving Conference, London, UK, June 2017.
- Maemura, E.** (2017). *How Web Archives are, are not, could be, and should be Archives*. Paper presented at the 9th annual Archival Education and Research Institute (AERI), Toronto, ON, July 2017.
- Maemura, E.**, Price, M., Sands, A. (2017). *Challenges for Grassroots Web Archiving of Environmental Data*. Panel presentation at the Web Archiving and Digital Libraries Workshop at the ACM/IEEE Joint Conference on Digital Libraries, Toronto, ON, July 2017.
- Maemura, E.**, Dearborn, D., Trimble, L., Gertler, M., & Becker, C. (2016). *Identifying RDM Drivers, Gaps and Opportunities: A Baseline Assessment*. Poster presented at the 11th International Digital Curation Conference (IDCC16), Amsterdam, the Netherlands.

Becker, C., **Maemura, E.**, Duretec, K., Kulmukhametov, A., Rauber, A., Kulovits, H., Vieira, R., Cardoso, R., & Borbinha, J. (2015). *BenchmarkDP: Evidence for Digital Preservation*. Poster presented at the 10th International Digital Curation Conference, London, UK.

Invited Lectures

Guest Lecturer, INF1330: Archives Concepts and Issues – University of Toronto, Faculty of Information, November 2024.

Co-presenter (with Helena Byrne, British Library) “AI ready library collections; the practicalities” JISC Webinar, February 2024.

Speaker, “Preserving and Analyzing Digital Texts.” Online Symposium presented by the Andrew W. Mellon Society of Fellows in Critical Bibliography, Rare Book School, Charlottesville, VA (virtual), April 2023.

Speaker, “Researching Web Archives and the Materiality of Born-Networked Texts.” Digital Humanities Brown Bag Lunch, Max Planck Institute for the History of Science (MPIWG), Berlin, Germany (virtual), April 2023.

Guest Lecturer, INFO6370: Records Management – Dalhousie University, School of Information Management, March 2022.

Keynote Speaker, “Towards an Infrastructural Description of Archived Web Data.” WARCnet Meeting, Aarhus, Denmark (virtual), April 2021.

Panelist, “Making, Using, and Exploring Web Archives: Tales from Scholars & Practitioners.” Web Archiving and Digital Libraries, a Virtual Workshop of the ACM/IEEE Joint Conference on Digital Libraries, Wuhan, Hubei, P.R. China, August 2020.

Speaker, “Doing Infrastructure Ethnography: exploring the logics and orders shaping web archives collections.” iSchool, University of British Columbia, Vancouver BC, March 2019.

Guest Lecturer, CCT385H: An Introduction to Media Environments – University of Toronto, Institute of Communication, Culture, Information and Technology, February 2019.

Speaker, “Explorations of Netarkivet: Preliminary Findings.” NetLab Forum, Aarhus University, Aarhus, Denmark, May 2018.

Speaker, “If These Crawls Could Talk: Studying and Documenting Web Archives Provenance.” NetLab Forum, Aarhus University, Aarhus, Denmark, February 2018.

Speaker (with Christoph Becker & Ian Milligan) “How are Web Archives Made and Used? A Report and Discussion on Work in Progress at the Digital Curation Institute.” Faculty of Information, University of Toronto, Toronto ON, February 2017.

Workshops and Colloquia

- Co-organizer (with Helena Byrne, British Library) “Describing Collections with Datasheets for Datasets” Workshop at the IIPC Web Archiving Conference, Hilversum, the Netherlands, May 2023.
- Participant, Collections as Data: State of the Field and Future Directions, Internet Archive Canada, Vancouver, BC, April 2023.
- Participant, Early Career Colloquium at the iConference, Barcelona, Spain (virtual), March 2023.
- Participant, Doctoral Colloquium at the Association for Information Science and Technology Annual Meeting, Vancouver, BC, November 2018.
- Participant, Doctoral Colloquium at the Association of Internet Researchers Conference, Montreal, QC, October 2018.
- Participant, McLuhan Centre PhD Summer Residency, Toronto, ON, July 2017.
- Co-organizer (with Christoph Becker and Ian Milligan) “Data, process, and results: Connecting web archival research elements” workshop coordinated at the Researchers, Practitioners and the Archived Web Conference, University of London, London, UK, June 2017.
- Participant, Archives Unleashed 4.0: Web Archives Datathon, British Library, London, UK, June 2017.
- Co-organizer (with Dawn Walker) “Touring the Internet” workshop at the MidweSTS Graduate Student Workshop, Illinois Institute of Technology, Chicago, IL, September 2016.
- Participant, Archives Unleashed 2.0: Web Archives Datathon, Library of Congress, Washington, D.C., June 2016.
- Participant, Archives Unleashed Web Archives Datathon, University of Toronto, Toronto, ON, March 2016.
- Participant, Digital Methods Initiative Summer School, University of Amsterdam, July 2015.

Advisory and Reference Groups

- Expert Reference Group, BelgicaWeb Project, University of Ghent, 2023–2024
- WARC School Development Working Group, Archiving the Black Web Project, Shift Collective and The College of Wooster, October 2023–March 2024

Research Experience

- Guest Researcher, NetLab, Aarhus University, Spring 2018
Conducted fieldwork for my doctoral dissertation hosted by NetLab and Dr. Niels Brügger.
- Research Assistant, Digital Curation Institute, University of Toronto, 2014–2016
BenchmarkDP project (PI: Christoph Becker).
- Research Assistant, GRAND Networks of Centres of Excellence, 2013–2014
Media Enabled Organizational Workflow (MEOW) project (supervised by Kelly Lyons).

Teaching

University of Illinois at Urbana-Champaign

Archiving the Web, Spring 2025

Online instruction, Elective course for MSLIS graduate degree (20 students)

Information Organization and Access, Spring 2024, Fall 2024, Fall 2025

Online instruction, Required course for MSLIS graduate degree (average 40 students)

Digital Preservation, Fall 2023, Fall 2024, Fall 2025

Online instruction, Elective course for MSLIS graduate degree (average 25 students)

Data Management, Curation and Reproducibility: Fall 2022, Spring 2023

In-Person instruction, cross-listed undergraduate and graduate course, required for X+DS undergraduate major (F22: 30 students; S23: 6 students)

Independent Study, Fall 2022, Spring 2023

Advised PhD student Yingying Han on the topic “Computational Approaches in Archives” with the goal of producing an environmental scan

University of Toronto

Course Instructor for Information Workshop “Research Data Curation” Winter 2021

Proposed and designed a new 6-week course; 2 sections of 25 master’s students

Teaching Assistantships:

Online Information Retrieval (graduate course) Summer 2020

Information Systems, Services and Design (graduate course) Fall 2018, Summer 2019

Introduction to Information Systems (graduate course) Fall 2015

Data Modelling and Database Design (graduate course) Winter 2019

Digital Preservation and Curation (graduate course) Fall 2014, Fall 2017

Information Systems (undergraduate course) Winter 2019

PhD Student Supervision

Sydney Benning, Co-advisor (with Professor Emily Knox), 2023-Present

Ruby Martinez, Committee Member, 2025-Present

Chenyue Jiao, Committee Member for Field Exam, Fall 2022

Departmental Service at the University of Illinois at Urbana-Champaign

Member, Diversity Committee, 2024-25

Member, Doctoral Program Committee, 2023-24

Member, MSLIS/CAS Program Committee, 2022-23

Member, Data Science Task Force Member, 2022-23

Member, Digital Preservation Job Search Committee, 2022-23

Member, MSIM/Bioinformatics Program Committee, Spring 2022

Additional Service and Volunteer Activity

Mentor, AoIR Doctoral Colloquium 2023

Mentor, ASIS&T Doctoral Colloquium 2025

Service in Conferences, Societies, and Councils

Member of the Program Committee, IIPC Web Archiving Conference, Oslo, Norway, 2025

Member of the Program Committee, RESAW Conference, Siegen, Netherlands, 2025

Member of the Program Committee, Born Digital Collections, Archives and Memory Conference, London, UK, 2025

Member of Scientific Committee, RESAW Conference, Marseille, France, 2023

Member of Scientific Committee, WARCnet Closing Conference, Aarhus, Denmark, 2022

Reviewer, Irish Research Council, Laureate Award, 2022

Co-Chair Posters & Demos, ACM/IEEE Joint Conference on Digital Libraries, 2017

Doctoral Subcommittee, Archival Education and Research Institute, 2017

Editorial Service and Peer Review

Book Reviews Editor, *Internet Histories*, 2023–present

Peer reviewer for journals:

Archival Science: International Journal on Recorded Information

Archives & Manuscripts, Journal of the Australian Society of Archivists

Big Data & Society

Cambridge Forum on AI: Culture and Society

Information, Communication & Society

Internet Histories: Digital Technology, Culture and Society

Journal of the Association for Information Science and Technology (JASIS&T)

Peer reviewer for conferences:

Association of Internet Researchers Conference 2024, 2025

iConference 2024, 2025

IIPC Web Archiving Conference, 2025

RESAW 2023, 2025

Grants

University of Toronto–University of Illinois Joint Call for Proposals Seed Grant, “Envisioning Critical Futures for Archives as Data” (with co-PI Dr. Jessica Lapp), 2025–26
Social Science and Humanities Research Council of Canada Joseph-Armand Bombardier Canada Graduate Scholarship Doctoral Award, 2015–2018
Social Science and Humanities Research Council of Canada Michael Smith Foreign Study Supplement, 2018
University of Toronto Graduate Research Travel Grant, 2018

Awards & Honors

University of Toronto Faculty of Information Doctoral Completion Award, 2020
Beta Phi Mu Eugene Garfield Doctoral Dissertation Fellowship, 2019
Ontario Graduate Scholarship, 2014, 2018
ASIS&T Annual Meeting Mentorship Program Travel Award, 2018
IIPC Web Archiving Conference Student Travel Bursary, 2017
University of Toronto Faculty of Information PhD Conference Travel Award, 2017
Archives Unleashed Hackathon Travel Award, 2016
University of Toronto Faculty of Information PhD Conference Travel Award, 2015
University of Toronto Faculty of Information Fellowship, 2014–2018

Professional Affiliations

Association for Information Science and Technology (ASIS&T)
Association of Internet Researchers (AoIR)
Society for the Social Studies of Science (4S)