

Ian Milligan

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Education

2012, Doctor of Philosophy (History), York University
2007, Master of Arts in History, York University
2006, Bachelor of Arts in History (Honours), Queen's University

Professional Experience

2017 – Present, Associate Professor, Department of History, University of Waterloo.
2012 – 2017, Assistant Professor, Department of History, University of Waterloo.
2012, Social Sciences and Humanities Research Council Postdoctoral Fellow, Department of History, Western University.

Visiting Appointments

2019, Visiting International Scholar, Lehrstuhl für Digital Humanities, University of Passau.
2016 – 2017, Marshall McLuhan Centenary Fellow, Faculty of Information Studies, University of Toronto.

Scholarly Awards

2020, Honourary Archivist Award, Association of Canadian Archivists.
2019, Arts Excellence in Research Award, University of Waterloo.
2016, Outstanding Early Career Award, Canadian Society for Digital Humanities.
2015, Shortlisted for the Canadian Historical Association's Best Scholarly Book in Canadian History Prize (then known as the Sir John A. Macdonald Prize)
2014, Outstanding Performance Award, University of Waterloo.
2013, Best Article Prize, *Journal of the Canadian Historical Association*.

RESEARCH ACTIVITY

Publications

Books

Ian Milligan, *History in the Age of Abundance? How the Web is Transforming Historical Research*. Montreal & Kingston: McGill-Queen's University Press, 2019.

- Subject of an *American Historical Review* roundtable: Daniel J. Story, Jo Guldi, Tim Hitchcock, Michelle Moravec, "History's Future in the Age of the Internet," *American Historical Review*, Vol. 125, Issue 4 (October 2020): 1337-1346. I responded in Ian Milligan, "How Can We Be Ready to Study History in the Age of Abundance? A Response," *American Historical Review*, Vol. 125, Issue 4 (October 2020): 1347-1349.
- Reviewed in *Canadian Historical Review*, *Literary Review of Canada*, *Internet Histories*, *Business History*, *Quinto Sol: Revista de Historia*, *Kasvatus & Aika*, and *Canada's History* (author interview).

Shawn Graham, **Ian Milligan**, and Scott Weingart, *Exploring Big Historical Data: The Historian's Macroscope*. London: Imperial College Press, 2016.

- Reviewed in *Reviews in History*, *Choice Reviews Online*, and *Histoire Sociale/Social History*.
- Translated into Chinese.

Ian Milligan, *Rebel Youth: 1960s Labour Unrest, Young Workers, and New Leftists in English Canada*. Vancouver: UBC Press, 2014.

- Shortlisted for the John A. Macdonald Prize in Canadian History (now Canadian Historical Association Best Scholarly Book in Canadian History Prize).
- Reviewed in *BC Studies*, *Blacklock's Reporter*, *Briarpatch Magazine*, *Canadian Historical Review*, *Choice Reviews Online*, *Historical Studies in Education*, *Labour/Le Travail*, and *Manitoba History*.

Edited Collection

Niels Brügger and **Ian Milligan**, eds. *SAGE Handbook of Web History*. London: SAGE, 2018.

- Reviewed in *Internet Histories*, *Choice Reviews Online*.

Peer-Reviewed Journal Articles

Samantha Fritz, **Ian Milligan**, Nick Ruest, and Jimmy Lin, "Fostering Community Engagement through Datathon Events: The Archives Unleashed Experience," *Digital Humanities Quarterly*, vol. 15, no. 1 (2021).

Nick Ruest, Samantha Fritz, Ryan Deschamps, Jimmy Lin, and **Ian Milligan**, "From Archive to Analysis: Accessing Web Archives at Scale through a Cloud-Based Interface," *International Journal of Digital Humanities*. Available online ahead of print, 6 January 2021.

Ian Milligan, “We Are All Digital Now: Digital Photography and the Reshaping of Historical Practice,” *Canadian Historical Review*, vol. 101, no. 4 (December 2020): 602-621.

Samantha Fritz, **Ian Milligan**, Nick Ruest, and Jimmy Lin. “Building Community at a Distance: A Datathon During COVID-19,” *Digital Library Perspectives*, vol. 36, issue 4 (December 2020): 415-428.

Emily Maemura, Nicholas Worby, **Ian Milligan**, and Christoph Becker, “If These Crawls Could Talk: Studying and Documenting Web Archives Provenance,” *Journal of the Association for Information Science and Technology*. 2018, vol. 69, issue 10 (October 2018): 1223-1233.

Gabriel A. Devenyi, Rémi Emonet, Rayna M. Harris, Kate L. Hertweck, Damien Irving, **Ian Milligan**, Greg Wilson, “Ten Simple Rules for Collaborative Lesson Development.” *PLOS Computational Biology*, Vol. 14, Number 3, March 2018: e1005963.

Jimmy Lin, **Ian Milligan**, Jeremy Wiebe, and Alice Zhou. “Warcbase: Scalable Analytics Infrastructure for Exploring Web Archives,” *ACM Journal of Computing and Cultural Heritage*, Vol. 10, Issue 4, July 2017: 22:1-22:30.

Ian Milligan, “Lost in the Infinite Archive: The Promise and Pitfalls of Web Archives,” *International Journal of Humanities and Arts Computing*, Vol. 10, No. 1-2 (2016): 78-94.

Ian Milligan, Nick Ruest, and Anna St-Onge, “The Great WARC Adventure : Using SIPS, AIPS and DIPS to document SLAAPs,” *Digital Studies / Le champ numérique*, Vol. 6, 2016.

Ian Milligan, “A Haven for Perverts, Criminals, and Goons’: Children and the Battle for and Against Canadian Internet Regulation, 1991-1999,” *Histoire Sociale/Social History*, vol. 47, No. 96 (May 2015): 245-274.

Ian Milligan, “Illusionary Order: Online Databases and the Changing Foundation of Canadian Historiography, 1997-2010,” *Canadian Historical Review*, Vol. 94, No. 4 (December 2013): 540-569.

Ian Milligan, “Mining the ‘Internet Graveyard’: Rethinking the Historians’ Toolkit,” *Journal of the Canadian Historical Association*, Vol. 23, No. 2 (Spring/Summer 2013): 21-64.

- Awarded the *Journal of the Canadian Historical Association’s* Best Scholarly Article Award.

Ian Milligan, “Coming off the Mountain: Forging an Outward Looking New Left at Simon Fraser University,” *BC Studies: The British Columbian Quarterly*, Vol. 171 (Autumn 2011): 69-91.

Ian Milligan, “‘This Board Has a Duty to Intervene,’ Challenging the Spadina Expressway Through the Ontario Municipal Board, 1963-1971,” *Urban History Review/Revue d’histoire urbaine*, Vol. 39, No. 2 (Spring 2011): 25-37.

Ian Milligan, “‘The Force of All Our Numbers’: New Leftists, Labour, and the 1973 Artistic Woodwork Strike,” *Labour/Le Travail*, 66 (Fall 2010): 37-71.

Ian Milligan, “Sedition in Wartime Ontario: The Trials and Imprisonment of Isaac Bainbridge, 1917-1918,” *Ontario History*, Vol. 100, No. 2 (Autumn 2008): 150-177.

Peer-Reviewed Conference Publications

In computer science, peer-reviewed conference publications are formal publications that receive comprehensive peer review.

Nick Ruest, Jimmy Lin, **Ian Milligan**, and Samantha Fritz. “The Archives Unleashed Project:

Technology, Process, and Community to Improve Scholarly Access to Web Archives.” *Proceedings of the ACM/IEEE Joint Conference on Digital Libraries*, 2020: 157-166.

Jimmy Lin, **Ian Milligan**, Douglas W. Oard, Nick Ruest, and Katie Shilton. “We Could, but Should We? Ethical Considerations for Providing Access to GeoCities and Other Historical Digital Collections.” *Proceedings of the ACM SIGIR Conference on Human Information Interaction and Retrieval (CHIIR)*, 2020: 135-144.

Ryan Deschamps, Samantha Fritz, Jimmy Lin, **Ian Milligan**, and Nick Ruest. “The Cost of a WARC: Analyzing Web Archives in the Cloud.” *Proceedings of the ACM/IEEE Joint Conference on Digital Libraries*, 2019: 261-264.

Ian Milligan, Nathalie Casemajor, Samantha Fritz, Jimmy Lin, Nick Ruest, Matthew S. Weber, and Nicholas Worby. “Building Community and Tools for Analyzing Web Archives through Datathons.” *Proceedings of the ACM/IEEE Joint Conference on Digital Libraries*, 2019: 265-268.

Emily Maemura, Christoph Becker, and **Ian Milligan**. “Understanding Computational Web Archives Research Methods Using Research Objects,” *IEEE Big Data Workshop in Computational Archival Science*, IEEE Big Data, December 2016: 3250-3259.

Ian Milligan, Nick Ruest, and Jimmy Lin, “Content Selection and Curation for Web Archiving: The Gatekeepers vs. the Masses,” *Proceedings of the ACM/IEEE Joint Conference on Digital Libraries*, 2016: 107-110.

Andrew Jackson, Jimmy Lin, **Ian Milligan**, and Nick Ruest, “Desiderata for Exploratory Search Interfaces to Web Archives in Support of Scholarly Activities,” *Proceedings of the ACM/IEEE Joint Conference on Digital Libraries*, 2016: 103-106.

Peer-Reviewed Book Chapters

Ian Milligan and Tom J. Smyth, “Studying the Web in the Shadow of Uncle Sam: The Case of the .ca Domain,” in *The Historical Web and Digital Humanities: The Case of National Web Domains*, eds. Niels Brügger and Ditte Laursen (London: Routledge, 2018): 45-63.

Ian Milligan, “Learning to ‘See’ the Past at Scale: Exploring Web Archives through Hundreds of Thousands of Images,” in *Seeing the Past with Computers*, ed. Kevin Kee and Timothy Compeau (Ann Arbor: University of Michigan Press, 2018): 116-136.

Ian Milligan. “Historiography and the Web,” in *SAGE Handbook of Web History*, eds. Niels Brügger and Ian Milligan. London: SAGE, 2018: 3-15.

Ian Milligan. “Exploring Web Archives in the Age of Abundance: The Case of GeoCities,” in *SAGE Handbook of Web History*, eds. Niels Brügger and Ian Milligan. London: SAGE, 2018: 344-358.

Ian Milligan and Robert Warren. “Big Data and the Coming Historical Revolution: From Black Boxes to Models,” in *Big Data in the Arts and Humanities: Theory and Practice*, eds. Giovanni and Daniela Carlucci. Boca Raton: CRC Press (Taylor & Francis Group), 2018: 65-76.

Ian Milligan, “Welcome to the Web: The Online Community of GeoCities During the Early Years of the World Wide Web,” in *The Web as History: Using Web Archives to Understand the Past and the Present*, eds. Niels Brügger and Ralph Schroeder (London: UCL Press, 2017): 137-158.

William J. Turkel and **Ian Milligan**, “The Challenge of ‘High-Throughput’ Computational Methods,” in *From Big Bang to Global Civilization: A Big History Anthology*. Eds. Barry Rodrigue,

Leonid Grinin, and Andrey Korotayev. New Delhi, India: Primus Books, 2015: 145-157.

Book and Software Reviews

Review of Joel Belliveau, *In the Spirit of 68: Youth Culture, the New Left, and the Reimagining of Acadia*, trans. Käthe Roth (Vancouver: UBC Press, 2019) in *Journal of New Brunswick Studies*, Vol. 12 (2020).

Review of Dennis G. Molinaro, *An Exceptional Law: Section 98 and the Emergency State, 1919-1936* (Toronto: University of Toronto Press, 2017), in *University of Toronto Quarterly*, Vol. 88, No. 3 (Summer 2019).

Review of Lara Campbell, Dominique Clément, and Gregory S. Kealey, eds., *Debating Dissent: Canada and the Sixties* (Toronto: University of Toronto Press, 2012), in *Canadian Historical Review*, Vol. 94, No. 4 (December 2013).

Review of Benjamin Isitt, *Militant Minority: British Columbia Workers and the Rise of a New Left, 1948-1972* (Toronto: University of Toronto Press, 2011), in *Histoire Sociale/Social History*, Vol. 46, No. 92 (November 2013).

(With Shawn Graham) Review: "MACHINE Learning for Language Toolkit (MALLET)," in *Journal of Digital Humanities*, Vol. 2, No. 1 (Spring 2013).

Review: "The Alberta Federation of Labour's Centennial Website: A Fantastic Resource (if you can find it)," in *Oral History Forum/Forum d'histoire orale* 33 (2013).

Review of Jefferson Cowie, *Stayin' Alive: The 1970s and the Last Days of the Working Class* (New York: New Press, 2010), in *Labour/Le Travail*, 69 (Spring 2012): 235-237.

Review of Paul Mason, *Live Working or Die Fighting: How the Working Class Went Global* (Chicago: Haymarket Books, 2010), in *Labor History*, 52.3 (September 2011): 361-363.

Review of James Pitsula, *New World Dawning: The Sixties at Regina Campus* (Regina: Canadian Plains Research Centre, 2008), in *Canadian Historical Review*, 90:4 (December 2009): 818-820.

Review of Ian McKay, *Reasoning Otherwise: Leftists and the People's Enlightenment in Canada, 1890-1920* (Toronto: Between the Lines, 2008), *H-Canada*. February 2009.

Non-Peer Reviewed Professional Contributions

Ian Milligan, "How Can We Be Ready to Study History in the Age of Abundance? A response," *American Historical Review*, Vol. 125, Issue 4, October 2020: 1347-1349.

Esyllt Jones, **Ian Milligan**, and Shelley Sweeney. "Will Covid-19 become the 21st century's forgotten pandemic?" *Globe and Mail*, 5 October 2020.

Ian Milligan, "La historia en la era de la abundancia: archivos web e investigación histórica," *Historia Y Memoria*, Special 10th Anniversary Edition, 2020.

Ian Milligan, "2020 is a year for the history books, but not without digital archives," *The Conversation*, September 2020.

Ian Milligan, "Interdisciplinary scholarship needs to be normalized within professions," *University Affairs*, August 2020.

Ian Milligan, “Don’t despair if your teen wants to major in history instead of science,” *The Conversation*, November 2019.

Ian Milligan, “Historians’ archival research looks quite different in the digital age,” *The Conversation*, August 2019.

Ian Milligan, “Getting Ready to Study the Age of Abundance,” *Canadian Issues/Themes Canadiens*, Fall/Winter 2018: 36-39.

Ian Milligan, “The Problem of History in the Age of Abundance,” *The Chronicle of Higher Education*, December 2016.

Nick Ruest and **Ian Milligan**, “An Open-Source Strategy for Documenting Events: The Case Study of the 42nd Canadian Federal Election on Twitter,” *Code4Lib*, 32, April 2016. (This journal uses a robust form of editorial review)

Ian Milligan, “Open Data’s Potential for Political History,” *Canadian Parliamentary Review*, vol. 37, no. 4 (2014).

Shawn Graham, **Ian Milligan**, and Scott Weingart, “Writing The Historian’s Macroscope in Public,” *Perspectives on History (American Historical Association)*, October 2014.

Ian Milligan, “Does History Matter?” *Literary Review of Canada*, May 2014.

Ian Milligan, “Exploring the Web Through the Programming Historian,” *Canadian Historical Association Bulletin*, October 2013.

Ian Milligan, “Archives: Preserve Our Digital Heritage,” *Nature*, 497 (16 May 2013).

Grants (\$2,763,493 CAD total; \$2,379,240 CAD as PI):

Andrew W. Mellon Foundation (“Integrating Archives Unleashed Cloud with Archive-It”). Principal Investigator (PI): Ian Milligan, Co-I: Jimmy Lin, Nick Ruest, Jefferson Bailey. \$1,084,087 CAD. 2020 – 2023.

University of Waterloo AI Institute and Microsoft, AI for Social good Grant (“MANNERSS: Multilingual Adaptation for NER in the Social Sciences”). Principal Investigator (PI): Ian Milligan, Co-I: Jimmy Lin. \$25,000 CAD. 2020 – 2021.

Social Sciences and Humanities Research Council, Insight Grant (“Averting the Digital Dark Age: The Digital Preservation Movement, 1991-2001”). Principal Investigator (PI): Ian Milligan. \$97,602 CAD. 2020 – 2023.

Social Sciences and Humanities Research Council, Connection Grant (“Workshop on Quantitative Analysis and the Digital Turn in Historical Studies”). Principal Investigator (PI): Ian Milligan, Co-I: Chad Gaffield. \$11,779 CAD. 2018 – 2019.

Institute of Museum and Library Services, Laura Bush 21st Century Librarian Program (“Continuing Education to Advance Web Archiving”). PIs: Zhiwu Xie and Edward Fox, Partners: Los Alamos National Lab Research Library, Old Dominion University Department of Computer Science, the **University of Waterloo Department of History**, the Internet Archive, and George Washington University Libraries. \$248,451.00 USD, or \$314,824 CAD. 2018 – 2020.

Andrew W. Mellon Foundation (“Archives Unleashed Project”). PI: **Ian Milligan**, Co-PIs: Nick Ruest and Jimmy Lin. \$610,625 CAD. 2017-20.

Microsoft Research, Microsoft Azure Research Award (“Web Archives for Longitudinal Knowledge”). PI: **Ian Milligan**. \$20,000 USD, or \$26,804 CAD. 2016-17.

Compute Canada, Research Platforms and Portals Competition (“Web Archives for Longitudinal Knowledge”), \$11,635 CAD. PI: **Ian Milligan**, Co-I: Nick Ruest (York University). 2016-19.

Arts and Humanities Research Council (UK) (“Born-Digital Data and Methods for History and the Humanities”). £32,210 GBP, or \$60,125 CAD. PI: Jane Winters (University of London), Co-I: Tobias Blanke (King’s College, London), Main Partners: Sonia Ranade (National Archives of the UK), Anne Alexander (University of Cambridge), James Baker (University of Sussex), **Ian Milligan** (University of Waterloo), Jason Webber and Jonathan Pledge (British Library), Peter Webster (Webster Research and Consulting). 2016-17.

Social Sciences and Humanities Research Council, Connection Grant (“Unlock Your Web Archives Hackathon”). \$23,715 CAD. PI: **Ian Milligan**, Co-Is: Jimmy Lin (University of Waterloo), Matthew Weber (Rutgers University), Nathalie Casemajor (Université du Québec en Outaouais), Nicholas Worby (University of Toronto). 2015-16.

Social Sciences and Humanities Research Council, Insight Grant (“A Longitudinal Analysis of the Canadian World Wide Web as a Historical Resource, 1996-2014”). \$257,541 CAD. PI: **Ian Milligan**, Co-Is: Nick Ruest (York University), William Turkel (Western University). 2015-20.

Ontario Ministry of Research and Innovation, Early Researcher Award (“A Longitudinal Analysis of the Canadian World Wide Web as a Historical Resource, 1996–2014”). \$150,000 CAD. PI: **Ian Milligan**. 2015-20.

Social Sciences and Humanities Research Council, Connection Grant (“New Directions in Active History: Institutions, Communication, and Technologies”). \$19,304 CAD. PI: Thomas Peace (Huron University College), Co-Is: **Ian Milligan**, Jim Clifford (University of Saskatchewan), Daniel Ross (York University), Kaleigh Bradley (York University), Krista McCracken (Algoma University), Andrew Nurse (Mount Allison University). 2015-16.

Social Sciences and Humanities Research Council, Insight Development Grant (“An Infinite Archive?”). \$74,952 CAD. PI: **Ian Milligan**, Co-I: William Turkel (Western University). 2013-15.

University of Waterloo/Social Sciences and Humanities Research Council Institutional Block Grant, June 2013 – June 2015. \$5,500 CAD. PI: **Ian Milligan**. 2013-15.

Invited Keynotes

“Digitized Newspapers as Everyday Interdisciplinarity: The Transformation of Historical Scholarship,” NewsEye Conference, Paris, France. March 2021. (Delivered remotely during COVID-19)

“The Transformation of History in the Digital Age,” Queen’s University annual Nugent Lecture, Queen’s University, Kingston, ON, Canada. February 2021. (Delivered remotely during COVID-19) As part of the Nugent Lecture I also delivered two workshops for graduate students.

“You Shouldn’t Need to be a Web Historian to Use Web Archives,” Keynote at WARCNet, Aarhus, Denmark. April 2020. (Delivered remotely during COVID-19)

“Working with Cultural Heritage at Scale: Developing Tools and Platforms to Study the Age of Abundance,” Featured Talk at LaTeCH-CLfL 2019 (part of NAACL 2019), Minneapolis, Minnesota. June 2019.

“From Archiving to Analysis: Current Trends and Future Developments in Web Archive Use,” Keynote at the “Archiving the Web?”, Hilversum, Netherlands. October 2018.

“Web Archives and History,” Keynote at the Association of Canadian Archivists Annual Meeting, Edmonton AB. June 2018.

“Big Data and History (‘Or How this Historian Learned to Stop Worrying and Love Big Data,” Keynote at SFU Library Love Your Data Week 2018, Simon Fraser University, Burnaby BC. February 2018.

“Learning to Collaborate (or why you should hang out with librarians,” Keynote at Digital Pedagogy Institute 2017, Brock University, St. Catharines ON. August 2017.

“Archives Unleashed: Unlocking Born-Digital Sources through Interdisciplinary Collaboration,” Keynote at Canadian Society for Digital Humanities, University of Calgary, Calgary AB. May 2016.

“Lost in the Infinite Archive? Web Archives for Historical Research Today... and Tomorrow,” Keynote at Web Archives 2015: Capture, Curate, Analyze, University of Michigan, Ann Arbor MI. November 2015.

“Preparing for the Infinite Archive: Social Historians and the Digital Deluge,” Keynote at Tri-University History Conference: New Approaches to History, University of Guelph, Guelph ON. March 2013.

Invited Lectures and Workshops

“What Can We Do to Ensure Historians Do Not Fall into the Digital Dark Age,” Invited Lecture as part of “Big Data and the Historian’s Craft” Roundtable Series sponsored by Lignan University, Seoul National University, and Columbia University. Virtual. February 2021.

“From Engagement to Retreat? Historians and Digital Preservation, 1968-2003,” Invited Lecture as part of the UCLDH 2020-21 Seminar Series, University College London. Virtual. January 2021.

“The Archives Unleashed Project: Lowering Barriers to Access through Community and Infrastructure,” Invited Lecture as part of the DHLunch@GS Lecture Series at University of Texas, Austin. Virtual due to COVID-19. November 2020.

“La historia en la era de la abundancia: archivos web e investigación histórica,” Invited Lecture as part of “The Historiographical Experience” event, Universidad Pedagógica y Tecnológica de Colombia. Virtual due to COVID-19. October 2020.

“History in the Age of Abundance: Skills, Tools, and Methods for the 21st-Century Historian,” Invited Lecture at York University Department of History Historian’s Craft Series, Toronto ON. January 2020.

(With Nick Ruest) “Capturing the Web Today for Tomorrow: Innovations in Capturing and Analyzing Social Media and Websites for the New Scholarly Record,” Invited Lecture at York University Libraries, Toronto ON. March 2017.

“Web Scraping and Digital History,” Invited Workshop at the American Historical Association’s Getting Started in Digital History event, Denver CO. January 2017.

“Making Sense of Web Archives: Facing Big Data from the Historian’s Perspective,” Invited Lecture at Library of Congress, Washington DC. June 2016.

“Historians and the Impending Big Data Deluge: How the Web Changes Everything,” Invited Lecture at National Endowment for the Humanities, Washington DC. June 2016.

(With Nick Ruest) “Walking the WALK; Facilitating Interdisciplinary Web Archive Collaboration,” Invited Lecture at the University of Alberta, Edmonton AB. June 2016.

“Web Archives and are Reshaping Today’s Historical Record,” Invited Lecture, University of Saskatchewan, Saskatoon SK. March 2016.

“The Digital Humanities and Born-Digital Sources: Web Archives, Tweets, and the Record of Today,” Invited Lecture at Institute for Global History Speaker Series, Georgetown University, Washington DC. February 2016.

“Big Data and History: Seeing the Past through a Macroscopic,” Invited Lecture at Selskabet for Samtidshistorisk Forskning (Danish Society for Research in Contemporary History), Copenhagen Denmark. January 2016.

“Web Histories and Web Archives,” Invited Lecture at Government Information Day, Waterloo ON. December 2015.

“The Challenge of Digital Sources in the Web Age: Common Tensions Across Three Web Histories, 1994-2015,” Invited Lecture at Digital Curation Institute, University of Toronto, Toronto ON. October 2015.

“Between Content and Metadata: A Historian Faces Technical and Professional Challenges in Three Types of Web Archives,” Invited Lecture at British Library, London. October 2015.

“The Challenge of Digital Sources in the Web Age: Common Tensions Across Three Web Histories, 1994-2015,” Invited Lecture at Digital History Seminar, Institute for Historical Research, London UK. September 2015.

“Welcome to the GeoHood: Exploring Early Web History through the GeoCities Torrent, 1994-2009,” Invited Lecture at Centre for Internet Studies, University of Aarhus, Aarhus, Denmark. September 2015.

“Accessing Historical Data En Masse,” Invited Workshop at Massachusetts Institute of Technology, Cambridge, MA. January 2015.

“Big Data and History: How Web Archives Will Challenge, Complement and Enhance the Historical Profession,” Invited Lecture at Acadia Institute for Data Analytics, Acadia University, Wolfville NS. November 2014.

“Historians and the Web,” Invited Lecture at Big Data in the SSHRC Disciplines: Data from the Past, Present and Future, Western University, London ON. March 2014.

“Historians and the Web: Challenges and Potentials of the Infinite Archive,” University of Guelph DigiCafe Series, University of Guelph, Guelph ON. March 2014.

Conference Presentations

Ian Milligan, “We Are *All* Digital Now: The (Needed) Transformation of Historical Thinking,” *American Historical Association Webinar Series*, February 2021. [Our panel was originally slated to

present at AHA 2021 but was made into a virtual event in February]

Ian Milligan, “Integrating the Archives Unleashed Cloud with Archive-It,” *Archive-It Annual Partner Meeting*, Virtual. October 2020.

Ian Milligan, “Becoming a Desk(top) Profession: Digital Photography and the Changing Landscape of Archival Research,” *American Historical Association*, New York NY. January 2020.

Nick Ruest and **Ian Milligan**, “Lowering the Barrier to Access: The Archives Unleashed and Cloud Project,” *The Web that Was Conference*, Amsterdam Netherlands. June 2019.

Nick Ruest and **Ian Milligan**, “Web Archives Analysis at Scale with the Archives Unleashed Cloud,” *Coalition for Networked Information*, St. Louis, Missouri. April 2019.

Ian Milligan, “Opening up WARC’s: The Archives Unleashed Toolkit and Cloud Projects,” *International Internet Preservation Consortium*, Wellington, New Zealand. November 2018.

Ian Milligan, “The Ethics of Studying GeoCities,” *Ethics and the Archived Web*, New York, NY. February 2018.

Ian Milligan, “Too Much Information: Transparency, Metadata, and Search in the Age of Web Archives,” *American Historical Association*, Washington DC. January 2018.

Ian Milligan, “Researcher Access for Web Archives: Our Experiences,” *Mid-Atlantic Regional Archives Conference*, Buffalo, New York. October 2017.

Ziquan Wang, Borui Lin, **Ian Milligan**, and Jimmy Lin. “Topic Shifts Between Two US Presidential Administrations,” *Web Archives and Digital Libraries*, Toronto, ON. June 2017.

Emily Maemura, Nicholas Worby, Christoph Becker, and **Ian Milligan**, “Origin Stories: Documentation for Web Archives Provenance,” *International Internet Preservation Consortium/RESAW*, London, England. June 2017.

Ian Milligan, “‘Pages by Kids, for Kids’: Unlocking Childhood and Youth History through the GeoCities Web Archive,” *International Internet Preservation Consortium/RESAW*, London, England. June 2017.

Nick Ruest and **Ian Milligan**, “Learning to WALK (Web Archives for Longitudinal Knowledge): Building a National Web Archiving Collaborative Platform,” *International Internet Preservation Consortium/RESAW*, London, England. June 2017.

Ian Milligan and Nick Ruest, “Building a National Web Archiving Collaborative Platform,” *Canadian Society for Digital Humanities*, Toronto, Ontario. May 2017.

Ian Milligan, “Are we Ready to Write the History of the 1990s?” *Canadian Historical Association*, Toronto, ON. May 2017.

Ian Milligan. “Collaborative Digital History: Working with Librarians and Computer Scientists,” *American Historical Association*, Denver, Colorado. January 2017.

Ian Milligan, Jimmy Lin, Jeremy Wiebe, and Alice Zhou, “Exploring and Discovering Archive-It Collections with Warchase,” *Digital Humanities 2016*, Krakow, Poland, July 2016.

Ian Milligan and Nick Ruest, “Enabling Access to Canadian Archival Collections through WebArchives.ca,” *Canadian Society for Digital Humanities*, Calgary, Alberta, June 2016.

Nick Ruest and **Ian Milligan**, “An exploratory look at 3,039,804 #elxn42 tweets,” *International Internet Preservation Consortium Web Archiving 2016*, Reykjavik, Iceland, April 2016.

Matthew Weber and **Ian Milligan**, “Archives Unleashed: Hackathons as a Tool for Engaging Scholars with Web Archives,” *International Internet Preservation Consortium Web Archiving 2016*, Reykjavik, Iceland, April 2016.

Nick Ruest and **Ian Milligan**, “Enabling Access to Old Wu-Tang Clan Fan Sites: Facilitating Interdisciplinary Web Archive Collaboration,” *Code4Lib 2016*, Philadelphia, Pennsylvania. March 2016.

Ian Milligan, “Making Sense of the Web: Finding Community in the GeoCities Web Archives,” *American Historical Association*, Atlanta, Georgia. January 2016.

Ian Milligan, “Understanding early Web history through three case studies: methodological and technical challenges,” *Times and Temporalities of the Web conference*, Institut des sciences de la communication, Paris, France. December 2015.

Ian Milligan, Jimmy Lin, and Jeremy Wiebe, “Between Metadata and Content: Exploring Canadian Political History with Archive-It’s Research Services,” *Web Archives 2015: Capture, Curate, Analyze conference*, University of Michigan, Ann Arbor, MI. November 2015.

Jimmy Lin and **Ian Milligan**, “Warcbase: Building a Scalable Platform on HBase and Hadoop,” *Web Archiving Collaboration: New Tools and Methods*, Columbia University, New York, New York. June 2015.

Ian Milligan, “Welcome to the GeoHood: Using the GeoCities Web Archive to Explore Virtual Communities,” *Web Archives as Scholarly Sources: Issues, Practices, and Perspectives*, Aarhus Denmark. June 2015.

Ian Milligan, “WARCs, WATs, and wgets: Opportunity and Challenge for a Historian Amongst Three Types of Web Archives,” *International Internet Preservation Committee*, Palo Alto CA. April 2015.

Ian Milligan, “The Promise of WebARChive Files: Exploring the Internet Archive as a Historical Resource,” *American Historical Association*, New York City, NY. January 2015.

Ian Milligan, “Clustering Search to Navigate A Case Study of the Canadian World Wide Web as a Historical Resource,” *Digital Humanities 2014*, Lausanne, Switzerland. July 2014.

Ian Milligan and Nick Ruest, “The Great WARC Adventure: WARCs from Creation to Use,” *Canadian Archivists Association*, Victoria, BC. June 2014.

Ian Milligan, “A Haven for Perverts, Criminals, and Goons’: Children and the Battle for Canadian Internet Regulation, 1991-1999,” *Canadian Historical Association Annual Meeting*, Brock University, St. Catharine’s ON. May 2014.

Ian Milligan, “An Infinite Archive? Developing ‘HistoryCrawler’ to Explore the Internet Archive as a Historical Resource,” *International Internet Preservation Committee Annual Meeting*, Paris, France. May 2014.

Ian Milligan, “Rethinking the Archival Box,” *(Digital) Humanities Revisited – Challenges and Opportunities in the Digital Age*, Hanover, Germany. December 2013.

Ian Milligan, “The Internet Archive and Social Historians: Challenge and Potential Amidst the WebARChive Files,” *Canadian Historical Association Annual Meeting*, University of Victoria, Victoria BC. June 2013.

Ian Milligan, “Public History and the University: Opportunities and Challenges,” *Public History and the University Conference*, York University, Toronto ON. November 2012.

Ian Milligan, “Mining the ‘Internet Graveyard’: Exploring Canada’s Digital Collections Projects,” *Canadian Historical Association Annual Meeting*, University of Waterloo and Wilfrid Laurier University, Waterloo ON. May 2012.

Ian Milligan, “Embracing the ‘Big History’ Shift: Social Historians and Digital History (or ‘how I learned to stop worrying and love the n-gram’),” *Cultural Historiography: Emergent Themes and Methods*, University of Guelph, Guelph ON. March 2012.

Ian Milligan, “Youth Revolt: Class and Radicalism in English Canada’s Baby Boom Generation,” *Society for the History of Children and Youth Biennial Meeting*, Columbia University, New York City NY. June 2011.

Ian Milligan, “‘The Cry of Youth’: Class, Radicalism, and the Challenging of the Golden Age,” *Canadian Historical Association Annual Meeting*, University of New Brunswick, Fredericton NB. May-June 2011.

Ian Milligan, “Searching for Allies: The English-Canadian New Left and Broader Community Coalitions, 1968-1973,” *2010 Two Days of Canada Conference: ‘The Sixties: Canadian Style,’* Brock University, St. Catharines ON. November 2010.

Ian Milligan, “Towards a New Proletariat: Debating Class and Social Change Within the English-Canadian Student New Left,” *Canadian History of Education Association Biannual Meeting*, Toronto ON. October 2010.

Ian Milligan, “Growing Up on the Line: New Leftists, Youth, and Labour at the Artistic Woodwork Strike, 1973,” *Canadian Historical Association Annual Meeting*, Concordia University, Montreal QC. June 2010.

Ian Milligan, “From the Quad to the Picket Line: Towards a Labour History of the Long Sixties,” *Writing the Sixties: A Practical Symposium*, Carleton University, Ottawa ON. November 2009.

Ian Milligan, “No Firm Ground: The Canadian New Left and their Conceptions of Class, 1964-1968,” *Canadian Historical Association Annual Meeting*, University of British Columbia, Vancouver BC. June 2008.

Ian Milligan, “Sedition in Wartime Ontario: The Trials and Imprisonment of Isaac Bainbridge, 1918-1919,” *New Frontiers in Graduate History Conference*, York University, Toronto ON. February 2008.

Ian Milligan, “Towards a New Proletariat: The Canadian New Left and the Working Class,” *Global Sixties: New World Coming Conference*, Queen’s University, Kingston ON. June 2007.

TEACHING EXPERIENCE

Graduate Supervision

Doctoral Supervision

Eric Vero, 2020 – Present. (Co-supervision w/ Jay Dolmage, English)

Rebecca MacAlpine, 2018 – Present.

Sarah McTavish, 2016 – 2020.

Doctoral Committees

Ryan D'Eon, Committee Member. 2020 – Present.

Thomas Littlewood, Committee Member. 2019 – Present.

Katherine MacKinnon (Faculty of Information, University of Toronto), Committee Member. 2019 – Present.¹

Philip Miletic (English, University of Waterloo), Internal-External Examiner, 2018.

Victoria Campbell, Committee Member, 2013 – 2017 (defended).

Kimberly Martin (Faculty of Information & Media Studies, University of Western Ontario), External Examiner, 2016.

Jason Hawreliak (English, University of Waterloo), Internal-External Examiner, 2013.

Doctoral Comprehensive Exam Fields

Global Field, 2021.

Global Field, 2019.

Canadian History Field, 2017-18.

Global Field, 2017.

Masters Supervision

Rebecca Nickerson, Current.

Eric Vero, 2017.

Denée Renouf, 2017.

Patrick O'Leary, 2016.

Katie Mackinnon, 2016.

David Hussey, 2015.

Masters Committees

Krenare Recaj, 2021.

Elaine Jones, 2021.

Jake Harper, 2018.

David Alexander, 2017.

Danielle McDonald, 2015.

¹ I hold a status-only appointment for graduate supervision in the University of Toronto's Faculty of Information Studies.

Shelby Riddell, 2014.

Matt Ferguson, 2014.

Eric Reis, 2014.

Kira Burt, 2013.

Matt Ferguson, 2013.

Formal Classroom Teaching

University of Waterloo

Academic Term	Courses
Winter 2021	HIST 216: A Long History of the Internet (ONLINE) HIST 640: Digital History (Remote due to COVID-19)
Fall 2020	<i>Research Course Release</i>
Spring 2020	HIST 216: A Long History of the Internet (ONLINE)
Winter 2020	HIST 216: A Long History of the Internet (ONLINE) <i>Research Course Release</i>
Fall 2019	Parental Leave
Winter 2019	ARTS 490: Socio-Cultural Implications of Artificial Intelligence <i>Research Course Release</i>
Fall 2018	HIST 216: A Long History of the Internet <i>Online Course Development Course Release</i>
Winter 2018	HIST 216: A Long History of the Internet <i>Research Course Release</i>
Fall 2017	Parental Leave
Winter 2017	HIST 109: Ten Days that Shook the World HIST 303: Digital History HIST 602: Canadian History Projects Course
Fall 2016	HIST 250: What is History?
Winter 2016	HIST 250: What is History? HIST 602: Canadian History Projects Course
Fall 2015	Pre-Tenure Sabbatical
Winter 2015	HIST 303: Digital History HIST 403B: Canadian History Seminar
Fall 2014	HIST 250: What is History? HIST 403A: Canadian History Seminar
Winter 2014	HIST 303: Digital History HIST 388: Modern Canada
Fall 2013	HIST 250: What is History? Pre-Tenure Course Release
Winter 2013	HIST 303: Digital History HIST 388: Modern Canada
Fall 2012	HIST 255: History of Childhood and Youth in Canada Pre-Tenure Course Release

Trent University (Sessional Instructor)

Academic Term	Courses
Winter 2012	CAST/HIST 2285H – Canada in the 1960s

SERVICE TO THE UNIVERSITY AND PROFESSION**Service to the Faculty of Arts and the University of Waterloo**

Faculty Representative, University of Waterloo Board of Governors. 2020 – 2021.

Member, Faculty of Arts Tenure and Promotion Committee (FTPC). 2018 – 2021.

Member, University Honorary Degrees Committee. 2019.

Faculty-at-Large Senator, University of Waterloo Senate. 2018 – 2021.

Member, Library Search Committee for Associate University Librarian, Learning, Research and User Services. 2018.

Member, Library Search Committee for Associate University Librarian, Collections, Technology and Scholarly Communication. 2018.

Member, Library Search Committee for CLIR Postdoc. 2018.

Member, Library Search Committee for Digital Archivist. 2015.

Member, Arts Homecoming Committee. 2014.

Member, Library Search Committee for Digital Initiatives Librarian. 2014.

Member, Library Search Committee for Head, Special Collections and Archives. 2013.

Service to the Department of History, University of Waterloo

Department Chair Selection Advisory Committee (elected position). 2020-21.

Department Advisory Committee on Appointments (elected position). 2018. 2021. (two appointments)

Annual Performance Review Committee (elected position). 2019 – Present. (three appointments)

Graduate Committee. 2013 - 2014; 2018 – Present.

Self-Study Committee. 2017 – 2018.

Speaker Series Coordinator. 2014 - 2016; 2018 – Present.

Teaching Assistant Committee. 2014 – 2015.

Public History Committee. 2013 – 2014.

Specializations Committee. 2013 – 2014.

Editorships

Editor, *Internet Histories* (Academic Journal). 2016 - Present.

Special Issue Editor, *International Journal of Digital Libraries*. 2017 – 2018.

Editor, *Programming Historian*. 2012 – 2018.

Founding Co-Editor, Activehistory.ca Website. March 2009 – May 2015.

Book Review Editor, *Left History* (Academic Journal), York University. 2009 – 2011.

Conferences and Events Organized

Workshop Co-Chair, Joint Conference on Digital Libraries 2020, Xi'an, People's Republic of China. August 2020. [moved online due to COVID-19]

Archives Unleashed New York City: Web Archives Hackathon. PI. March 2020. Columbia University, New York, NY. [moved online due to COVID-19]

Archives Unleashed Washington DC: Web Archives Hackathon. PI. June 2019. George Washington University, Washington DC.

Archives Unleashed Vancouver: Web Archives Hackathon. PI. February 2019. Simon Fraser University, Vancouver BC.

“Workshop on Quantitative Analysis and the Digital Turn in Historical Studies,” PI. February/March 2019. Fields Institute for Research in Mathematical Sciences, Toronto ON.

Archives Unleashed Toronto: Web Archives Hackathon. PI. April 2018. University of Toronto, Toronto ON.

Archives Unleashed 4.0: Web Archives Hackathon. Co-Organizer. June 2017, London UK.

Co-Program Chair, Joint Conference on Digital Libraries 2017, Toronto ON. 2017.

Archives Unleashed 3.0: Web Archives Hackathon. Co-Organizer. 23-24 February 2017. Internet Archive, San Francisco, CA.

Posters and Demo Chair, Joint Conference on Digital Libraries 2016, Newark NJ. 2016.

Archives Unleashed 2.0: Web Archives Hackathon. Co-Organizer. 13-15 June 2016. Library of Congress, Washington DC.

Archives Unleashed: Web Archives Hackathon. PI and Main Coordinator. 3-5 March 2016. University of Toronto, Toronto ON.

Service to the Profession

Research Data Management Working Group, New Digital Research Infrastructure Organization (NDRIO). 2020 – Present.

Steering Committee (Elected member), ACM/IEEE Joint Conference on Digital Libraries. 2019 – Present.

Canadian Research Knowledge Network Preservation and Access Committee. 2018 – Present. Two terms (2018-2020; 2020-2023).

Library and Archives Canada Acquisition Committee member. 2015 – Present. Two terms (2015 – 2019; 2019 – 2022).

Selection Committee for Associate Professor in Digital Media History, Aarhus University. 2020 – 2021.

Grant Selection Committees

Insight Development Grant, History Committee Chair (SSHRC), 2021.

Awards to Scholarly Publications Program (ASPP), Publications Committee, 2020 – 2023.

Canada Foundation for Innovation, Expert Review Committee for Digital Libraries, 2020.

Insight Development Grant, History Committee (SSHRC), 2020.

New Frontiers in Research Fund, Government of Canada (SSHRC/NSERC/CIHR), 2019.

Digital Edition Publishing Grants, National Historical Publications & Records Commission, 2018 and 2019.

Compute Canada Expert Review Committee for Research Portals and Platforms, 2018.

Editorial/Advisory Boards

Editorial Board, *Journal of Digital History*, 2020 – Present.

Advisory Board, Computing Cultural Heritage in the Cloud Project, Library of Congress, 2019 – Present.

Editorial Board, *International Journal of Digital Libraries*, 2018 – Present.

Editorial Board, *CA: Journal of Cultural Analytics*, 2016 – Present.

Advisory Committee, Ontario Library Research Cloud (OLRC) Digital Scholarship Committee. 2015 – 2016.

Peer Reviewing

2021

Manuscript Reviewer, *Historical Methods*

Manuscript Reviewer, *International Journal of Digital Libraries*
 Grant Reviewer, NFRF Exploration

2020

Conference Program Committee, RESAW 2021
 Conference Program Committee, JCDL 2021 (Senior Program Committee Member)
 Manuscript Reviewer, *Technology and Culture*
 Manuscript Reviewer, *Left History*
 Book Proposal Review, Palgrave Macmillan (two separate proposals)
 Manuscript Reviewer, *Post45*
 Manuscript Reviewer, *JLIS.it*
 Manuscript Reviewer, *Archival Science*
 Manuscript Reviewer, *Revue d'histoire urbaine/Urban History Review*
 Manuscript Reviewer, *American Historical Review* (two separate manuscripts)
 Manuscript Reviewer, *Journal of Cultural Analytics* (2020)
 Book Proposal Review, Palgrave Macmillan (2020)
 Grant Reviewer, SSHRC Insight
 Grant Reviewer, NSERC Discovery
 Grant Reviewer, NFRF Exploration
 External Reviewer for Associate Professorship, Aarhus University

2019

Conference Program Committee, JCDL 2020 (Senior Program Committee Member)
 Manuscript Reviewer, *Historical Methods*
 Book Manuscript Reviewer, Routledge
 Manuscript Reviewer, *SAGE Open Nursing*
 Grant Reviewer, Fonds National de la Recherche Luxembourg
 Grant Reviewer, Swiss National Science Foundation (SNSF)
 Grant Reviewer, NHRPC-Mellon DEPC Implementation Grants
 Manuscript Reviewer, *BC Studies*
 Manuscript Reviewer, *Digital Scholarship in the Humanities*
 Book Proposal Reviewer, Springer
 Manuscript Reviewer, *Journal of Canadian Studies*

2018

Tenure File Reviewer, American R1 University
 Conference Program Committee, JCDL 2020 (Senior Program Committee Member)
 Conference Program Committee, RESAW 2019
 Manuscript Reviewer, *Journal of the Canadian Historical Association*
 Manuscript Reviewer, *Archivaria*
 Manuscript Reviewer, *History Compass*
 Manuscript Reviewer, *Frontiers in Digital History*
 Manuscript Reviewer, *Historical Methods*
 Manuscript Reviewer, *KULA: Knowledge Creation, Dissemination, and Preservation Studies*
 Manuscript Reviewer, *Digital Scholar*
 Manuscript Reviewer, *Canadian Historical Review*
 Grant Reviewer, SJU Faculty Research Grant

2017

Manuscript Reviewer, *Communication Methods and Measures*
 Manuscript Reviewer, *Journal of the Canadian Historical Association*
 Manuscript Reviewer, *Frontiers in Digital History*
 Manuscript Reviewer, *MLA Literary Studies in the Digital Age*
 Grant Reviewer, NHPC-Mellon Digital Edition Publishing Cooperative
 Grant Reviewer, Paul R. MacPherson Teaching Fellowship (McMaster University)
 Manuscript Reviewer, *KULA: Knowledge Creation, Dissemination, and Preservation Studies*
 Grant Reviewer, SSHRC Insight
 Manuscript Reviewer, *Digital Studies/Le champ numérique*
 Manuscript Reviewer, *International Journal on Digital Libraries*
 Grant Reviewer, Netherlands eScience Center/Dutch CLARIAH program for Digital Arts and Humanities
 Manuscript Reviewer, *Oxford Bibliographies*

2016

Manuscript Reviewer, *Journal of the Canadian Historical Association*
 Manuscript Reviewer, *CA: Journal of Cultural Analytics*

2015

Manuscript Reviewer, *New Media and Society*

Manuscript Reviewer, *American Historical Review*

Book Manuscript Reviewer, Wilfrid Laurier University Press

2014

Manuscript Reviewer, *Histoire sociale/Social History*

Manuscript Reviewer, *Historical Studies in Education*

2013

Manuscript Reviewer, *History of Intellectual Culture*

Professional Affiliations

American Historical Association (AHA).

Association for Computers and the Humanities (ACH).

Association for Computing Machinery (ACM).

Association for Literary and Linguistic Computing (ALLC).

Canadian Society for Digital Humanities (CSDH).