John R. Ladd

jrladd.com | jladd@washjeff.edu | 202-276-6073

Academic Positions

Assistant Professor, Computing & Information Studies, Washington & Jefferson College, Fall 2022–Present

Visiting Assistant Professor, Data Analytics, Denison University, Fall 2021–Spring 2022

Postdoctoral Fellow in Digital Humanities, Northwestern University, Fall 2019–Summer 2021

Research Fellow, *Six Degrees of Francis Bacon*, Carnegie Mellon University, calendar year 2017

Education

PhD, English Literature, Washington University in St. Louis, 2019

> **Dissertation**: *Network Poetics: Studies in Early Modern Literary Collaboration*, Supervisors: Steven Zwicker, Joseph Loewenstein, Anupam Basu.

MA, English and American Literature, Georgetown University, 2012

BA, English, Mercyhurst University, 2009

Publications

Forthcoming

"Modeling Expertise at the Crossroads of Machine Learning and the Humanities," with Christopher N. Warren, Laura S. DeLuca, Jonathan Armoza, Taylor Berg-Kirkpatrick, Kartik Goyal, and Nikolai Vogler. *Cultures of Scale: Disciplines, Data, and Labor. Debates in the Digital Humanities* (2026).

"Prosodic Influence and the Early Modern Period in the *Princeton Prosody Archive*." The Ends of Prosody. *The Journal of Cultural Analytics* (2026).

Articles & Essays

"Input/Output: LLMs, Compilation, and the History of Text Technologies." Metaphors of Compilation. *English Language Notes* (2026).

"Milton's Precarious Data." Precarious Milton. *Milton Studies* 68.1 (2026).

"Edge Cases: The Making of Network Navigator and Critical Approaches to DH Tools," with co-author Zoe LeBlanc. *Journal of Digital History* 3 (July 2024).

"Network Analysis + Digital Art History: A Roundtable on a Collective Scholarly Experience." *Digital Art History Journal* 7 (3 May 2024).

"Imaginative Networks: Tracing Connections Among Early Modern Book Dedications." *Journal of Cultural Analytics* 3 (2021).

"The Multivocal Monody: Milton and the Poetics of *Justa Edouardo King*." *Milton Studies* 61.1 (2019).

"Reassembling the Bacon: Crowdsourcing Historical Social Networks in the Redesign of *Six Degrees of Francis Bacon*." *Social Knowledge Creation in the Humanities Vol. 2.* New Technologies in Medieval and Renaissance Studies Series: Iter Press, 2022.

Reviews & Short Pieces

"Review of *Networking Print in Shakespeare's England: Influence, Agency, and Revolutionary Change*". *Modern Language Quarterly* 1 March 2023; 84 (1): 87–89.

"Kynaston, Francis." *The Chaucer Encyclopedia.* Wiley-Blackwell, 2023.

"Review of *Theatre, Community, and Civic Engagement in Jacobean London* by Mark Bayer." *The Shakespeare Newsletter*, Fall/Winter 2013.

Tutorials and Project Descriptions

"Working with Local LLMs (On Your Own Computer!)", with co-author Melanie Walsh. *AI for Humanists*, June 2025.

"Exploring Linked Art." Partnership with *Getty Collections Online*, March 2022.

"Understanding and Using Common Similarity Measures." *The Programming Historian*, May 2020.

"Spenser's Color Wheel." in John R. Ladd, Stephen Pentecost, Cora Lind Rozencohn, "Digital Projects," *Spenser Review* 49.3.5 (Fall 2019).

"*Six Degrees of Francis Bacon* and Network Analysis in Early Modern Studies", with co-author Jessica M. Otis. *The Shakespeare Newsletter* 67.2 (Spring/Summer 2018).

"Exploring and Analyzing Network Data with Python." Ladd, Otis, Warren, and Weingart. *The Programming Historian*, 2017.

Digital Projects

TRACE: Tools and Resources for Analysis of Early English Books Online and *Early Print*. A multi-institution project to improve and analyze the Early English Books Online–Text Creation Partnership corpus. Part of my postdoctoral fellowship with Northwestern University. Spring 2019–present.

Print & Probability. A multi-institution project to identify early modern printers via broken pieces of type, using computer vision and machine learning. Spring 2023-present.

CARTi: The Cultural Analytics Research and Teaching Initiative. A working group of early career scholars collaborating on better ways to sustain and promote cultural analytics research and teaching. Spring 2022-present.

Six Degrees of Francis Bacon. As research fellow (a postdoctoral position awarded to me before completion of my PhD), I led the redesign efforts for the new *Six Degrees* web application. Calendar year 2017.

Network Navigator. Web-based tool for network analysis, focusing on quantitative network metrics. First hosted by Carnegie Mellon University. Spring 2018. source code

Network Analysis + Digital Art History. Technical adviser for project teams working on network analysis in the field of art history. Funded by the Getty Foundation and hosted by the University of Pittsburgh. Summer 2019–Present.

Presentations

"Texts! In! Space! Evaluating Approaches to Historical Text Embeddings." *Cultural Analytics Praxis* Symposium. University of Washington, May 2026.

"Digital Maps Based on Historical Records." With Julia Bernier and Sinéad Bligh. *Data Science Seminar*. Washington & Jefferson College, March 2026.

"Human and Machine Intelligence in Networks of Early Modern Print." *Computational Humanities Research Group* Talk Series. Carnegie Mellon University, March 2026.

"Research and Teaching in Cultural Analytics." *Data Science Seminar*. Washington & Jefferson College, October 2025.

"Human and Machine Intelligence in Networks of Early Modern Print." Invited Talk. *Modeling Culture* Talk Series. Princeton University, September 2025.

"AI & LLMs as Tools for the Humanities." *Modeling Culture* Seminar. Princeton University, September 2025.

"How Early Modern is the Princeton Prosody Archive?" *Ends of Prosody* Conference. Princeton University, May 2025.

"Designing an Interdisciplinary Data Science Minor." Co-presented with Rebecca Rapp. *Innovations and Opportunities in Liberal Arts Computing Education*, SIGCSE Symposium, February 2025.

"Humanities in the Data Classroom." Co-organized panel *Sustaining Cultural Analytics Research and Teaching: The Future of Code and Data Work in DH. DH 2024 Conference*. George Mason University, August 2024.

"Networks of Biography: *Six Degrees of Francis Bacon* and John Aubrey's *Brief Lives*." *Networks and Transnational Communities of Letters*. University of New England Sydney, June 2024.

"DH Tools." Invited Talk. *A.W. Mellon Digital Humanities Workshop*. Carnegie Mellon University, May 2024.

"How to Read 60,000 Books." *Accessible Research Colloquium*. Washington & Jefferson College, October 2023.

"Cultural Analytics Pedagogies." *Association of Computers and the Humanities*. Virtual Conference, June/July 2023.

"Milton's Uncertain Data." *13th International Milton Symposium*. July 2023.

"Humanities Network Analysis." 2 3-day Workshops. *Digital Humanities Literacy Workshop*. Carnegie Mellon University, May 2023 & 2024.

Early Modern Data. Seminar Organizer. *Shakespeare Association of America*. April 2023.

"Artificial Intelligence Goes to English Class, with Jennifer Black, John Ladd, and Laura Turchi." *Shakespeare Unlimited* podcast: Episode 204. 27 February 2023.

"Recent Developments in Cultural Analytics." Invited Colloquium. Washington University in St. Louis. March 2023.

"Milton's Uncertain Data." *The Conference on John Milton*. June 2022.

"What We Talk About When We Talk About EEBO." EEBO Finds, Failures, and Futures seminar. *Shakespeare Association of America*. April 2022.

"Comparing Networks of Biography: *Six Degrees of Francis Bacon* and John Aubrey's *Brief Lives*." Invited Talk, *Historical Network Research* Lunch Lectures. March 2022. See slides.

"User-Friendly: The Future of DH Tools." Roundtable co-organized with Zoe LeBlanc. *Association for Computers and the Humanities*. July 2021.

"Networked Authorships and John Aubrey's *Brief Lives*." *Renaissance Society of America*. March 2021.

"Imaginative Networks: A Social Network Analysis of Dedications in Early Modern Printed Books." Digital Approaches to Book History seminar. *Shakespeare Association of America*. April 2020.

"Spenserian Digital Deformance and the Interpretive Power of Playfulness." Spenser and the Digital Humanities Roundtable. *Modern Language Association*. January 2020.

"Paratext at Scale." *Sixteenth Century Society and Conference*. October 2019.

"Digital Shakespeare and the Problem of the Test Case." *Employing Interdisciplinarity: Early Modern Legacies, Future Challenges* Symposium. University of Notre Dame. September 2019.

"New Horizons in Network Analysis: Machine Learning for Classification and Clustering." Panel co-organized with Melanie Walsh. Co-presented with Matthew Lavin. *Association for Computers and the Humanities*. July 2019.

"Shakespeare, Dryden, and Adaptation as Rivalry." Shakespeare's Enemies seminar. *Shakespeare Association of America*. April 2019.

"Hidden Authorial Labor in the Early Modern Social Network." Invited Talk, Issues in Digital Humanities Speaker Series. *Washington University*. November 2017. See slides.

"Tracking Print Culture with Named-Entity Recognition." PyLing Python Linguistics Group. *University of Pittsburgh*. October 2017.

"Dedication Networks and Political Crisis: Print Collaboration in the English Revolution." DH Faculty Research Group. *Carnegie Mellon University*. September 2017.

"Personified Maps and Social Networks in *Poly-Olbion*." *Renaissance Society of America*. April 2017.

"University Politics: Locke, Dryden, and the Social Networks of Academic Miscellanies." English Dept. Graduate Conference. Washington University, April 2016.

"Making Enemies: Dryden, Rochester, and Collaborative Rivalry." English Dept. Graduate Colloquium. Washington University, April 2015.

"Between To and From: Network Discovery in EEBO Dedications." Digital Humanities Computer Science Conference. Northwestern University, October 2014.

" 'Along the Shoares of Siluer Streaming Themmes': Spenser's Revisions of Chorography." Spenser Project Reunion Symposium. Washington University, February 2014.

"Author-Network: City Plays, Dramatic Authorship, and Other Early Modern Assemblages." (MA Thesis) English Graduate Student Colloquium. Georgetown University, May 2012.

"Concentric Spheres: Networked London and Collaborative Authorship in Three City Plays." English Graduate Student Colloquium. Georgetown University, May 2011.

"Text Appeal: Discursive Properties of Text in Old and New Media." Chesapeake Area American Studies Association Conference. George Mason University, April 2011.

"There's an App for That: Modernity at Large and in Your Pocket." Borderlines: Graduate English Organization Conference, March 2011.

Teaching

Washington & Jefferson College, Fall 2022–present:

- CIS 241 Introduction to Data Science.
- CIS 345 Advanced Data Analysis: Networks.
- CIS 375 Advanced Web Design.
- CIS 115 Information Technology & Society.
- CIS 112 Database Concepts.
- First Year Seminar: Information Overload!.

DA 101: Introduction to Data Analytics. Denison University, Fall 2021 & Spring 2022.

Introduction to Digital Humanities graduate seminar. Northwestern University, Fall 2020.

"Information Overload! Text Technologies from the Printing Press to the Smartphone." Northwestern University, Spring 2020; Spring 2021.

E. Lit. 395C: Shakespeare, co-taught with Anupam Basu. Washington University, Spring 2017.

E. Lit. 498W: The Spenser Lab, co-taught with Joseph Loewenstein. Washington University, Fall 2016.

"College Writing I: Harnessing Everyday Writing Skills in an Academic Setting." Washington University, Fall 2014.

Faculty Python Tutorial. Washington University, Summer 2019.

Teaching Assistantships:

E. Lit. 461: Imagining Tyrannicide, Remembering Regicide. Steven Zwicker and Derek Hirst. Washington University, Spring 2016.

E. Lit. 395C: Shakespeare. Joseph Loewenstein. Washington University, Spring 2015.

ENGL 041-01 Gateway: Turn-of-the-Century Fictions. Maggie Debelius. Georgetown University, Spring 2011.

Recent Workshops:

"Digital Approaches to Early Modern Books." *Dream Lab 2026*. Price Lab for Digital Humanities, University of Pennsylvania, May 2026.

"Humanities Network Analysis." University of Washington, May 2026.

"Digital Approaches to Early Modern Books." *Dream Lab 2025*. Price Lab for Digital Humanities, University of Pennsylvania, May 2025.

"Network Analysis for the Humanities." *A.W. Mellon Digital Humanities Workshop*. Carnegie Mellon University, May 2023 & 2024.

"Artificial Intelligence, Misinformation, and Democracy." Co-led with Amanda Holland-Minkley and Pax Gutierrez-Neal. Washington & Jefferson College, February 2024.

Technical Adviser. *Network Analysis + Digital Art History*. Invited instructor. Getty Advanced Workshop. Pittsburgh, July 2019 & 2020. Included "Understanding and Interpreting Your Network" webinar.

"Digital Humanities and the Job Market(s)." Comparative Literary Studies Graduate Workshop. Northwestern University, February 2020.

"Get to Know Your Computer: DH on the Command Line." Invited instructor. Digital Humanities Literacy Workshop. Carnegie Mellon University, May 2019. See slides.

"Balancing Domain Expertise and Digital Skills as a Graduate Student." Invited instructor. Issues in Digital Humanities Lunch Workshop Series. Washington University, November 2017.

"Computational Thinking." Invited instructor. Digital Humanities Literacy Workshop. Carnegie Mellon University, June 2017.

Additional past workshops on network analysis, book history, web scraping, using Github and Jekyll, and unsupervised clustering. Carnegie Mellon University and Washington University.

Programming Languages

Python: natural language processing with NLTK and SpaCy, machine learning with Gensim and SciKit Learn, plaintext and XML parsing, web applications with Flask and Django, data analysis with Pandas, quantitative network analysis with NetworkX

R: data analysis and visualization with Tidyverse; modeling and machine learning with Tidymodels

JavaScript: frontend web development with NodeJS, AngularJS, VueJS, and more; interactivity and visualization

D3.js: JavaScript visualization library for creating network graphs and other interactive charts

SQL: database management and data analysis with Postgres, MySQL, and SQLite

Other Technical Skills

TEI and XML markup, text encoding
HTML and CSS, building and maintaining websites
Site generators and content management systems (Jekyll, Wordpress, Drupal, etc.)
Experience with Gephi, Excel, OpenRefine

Professional Memberships

Association for Computers and the Humanities
Association for Computational Linguistics (SIGHUM)
Cultural Analytics Research and Teaching Initiative (founding member)
Northeast Milton Seminar (by nomination)
Shakespeare Association of America

Fellowships and Assistantships

Early Modern Digital Agendas Participant. Folger Shakespeare Library, Summer 2017.
Spenser Project Graduate Assistantship. Washington University, Spring 2015-Present.
Humanities Digital Workshop Summer Fellowship. Washington University, Summers of 2013-16.
Research assistantships with Steven Zwicker (Fall 2013-14), Daniel Shore (Fall 2012), and Lena Orlin (Summer 2011).
Thresholds of Writing Teaching Fellowship. Georgetown University, 2011-12.
Fellow at Center for New Designs in Learning and Scholarship. Georgetown University, 2010-11.

Service

Academic Status Committee, Washington & Jefferson College (Fall 2026–Spring 2029)
Emerging Technologies Working Group, Washington & Jefferson College (Fall 2025–Present)
Scholars Day Committee, Washington & Jefferson College (Fall 2025–Present)
Artificial Intelligence Task Force, Washington & Jefferson College (Spring–Fall 2024)
SafeZone Facilitator, Washington & Jefferson College (Spring 2024–Present)
Search Committee for Chief Technology Officer, Washington & Jefferson College (Fall 2024)
English Team Editor, *The Programming Historian* (Spring 2022–Present)
Co-Founder, Digital Approaches Reading Group (Fall 2015–19)
Convener, English Dept. Graduate Advisory Panel (2015–16)
English Dept. Peer Mentor (Spring 2015)
Convener, Early Modern Reading Group (Fall 2014)
Editor, *Predicate*: Georgetown University English Studies Journal (2011-12)