

# John R. Ladd

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## Academic Positions

Assistant Professor, Computing and Information Studies, Washington and 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

## Research and Teaching Interests

Early modern literature and culture, Data Analysis and Visualization, Digital Humanities, Poetry, Shakespeare and Renaissance Drama, Milton, Restoration Literature, Book History

## Publications

“[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.

“[Review of \*Networking Print in Shakespeare’s England: Influence, Agency, and Revolutionary Change\*](#).” *Modern Language Quarterly* 1 March 2023; 84 (1): 87–89.

“[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).

“Kynaston, Francis.” Forthcoming in *The Chaucer Encyclopedia*. Wiley-Blackwell, after 2019.

“[Exploring and Analyzing Network Data with Python](#).” Ladd, Otis, Warren, and Weingart. *The Programming Historian*, 2017.

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

## Digital Projects

*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 by identifying 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. Hosted by Carnegie Mellon University. Spring 2018. [source code](#)

*Dedication Networks in EEBO-TCP Texts*. Incorporated into final dissertation chapter, uses NLP to detect names in early modern printed book dedications. Also includes multiple interactive network visualizations of results. Fall 2014–Present.

*Exploring Linked Art*. JavaScript tutorial series demonstrating data analysis and machine learning techniques using Linked Art, a linked open data model for cultural heritage objects. Developed for the Getty Museum and built on the Observable notebook platform. Spring 2022.

*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.

*Early Modern Digital Agendas Network*. Created a network visualization of the three EMDA seminars at the Folger Shakespeare Library for Ruth Ahnert’s [blog post recap](#). Summer 2017.

*University Miscellany Network*. Bipartite graph representing participants in university collections during the 1650s and 1660s. Spring 2016.

*Detecting meter in early modern verse* (in-progress). Using digital scansion tools, especially the CMU Pronouncing Dictionary, to identify poetic meter. Spring 2015–present.

*Endless Monument*. A deformance exercise for the Spenser Project that uses Python and Twitter’s API to tweet lines of Spenser’s *Epithalamion* using the poem’s own time-scheme. Summer 2014.

*Marvel Network*. A demonstration of NetworkX and D3 Force-Directed graphs for digital humanities applications, using sample data from Marvel comics. Summer 2016. [source code](#)

*Spenser’s Color Wheel*. Data visualization and deformance project exploring Spenser’s use of color terms in *The Faerie Queene*. Allows users to rearrange Spenser’s color lines into unique poems. Summer 2016. [source code](#)

## Presentations

“Milton’s Uncertain Data.” *13th International Milton Symposium*. July 2023.

“Humanities Network Analysis.” 3-day Workshop. *Digital Humanities Literacy Workshop*. Carnegie Mellon University, May 2023.

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.

## **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.

## **Teaching**

Washington & Jefferson College:

[CIS 241 Introduction to Data Mining](#). Fall 2022-present.

[CIS 345 Advanced Data Analysis: Networks](#). Spring 2023-present.

[CIS 100 Information Technology & Society](#). Fall 2022-present.

[CIS 112 Database Concepts](#). Fall 2023-present.

[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:*

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 (similar to R programming language), 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

## Service

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)

## Languages

Latin and Greek, reading knowledge