

JEFFREY M. BINDER

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CURRENT POSITIONS:

Open Raven (Los Angeles, CA/remote) May 2022–
Senior Data Scientist
Developing automated methods for detecting sensitive data in petabyte-scale cloud instances.

New York University (New York, NY) Fall 2023
Visiting Instructor
Teaching the PhD-level course “Topics in Digital Humanities: Digital Literary Studies.”

EDUCATION AND ACADEMIC POSITIONS:

Pennsylvania State University (University Park, PA) Aug. 2018–May 2022
Postdoctoral Fellow, Center for Humanities and Information

The Graduate Center, City University of New York (New York, NY) May 2018
PhD in English
Certificate in Interactive Technology and Pedagogy
Dissertation: “Symbols Purely Mechanical: Language, Modernity, and the Rise of the Algorithm, 1605–1862”
Advisor: Alexander Schlutz

New York University (New York, NY) May 2012
Master of Arts in English
Thesis: “Motivated Romanticism: Rhetoric, Cognition, and Herman Melville's Linguistic Turn”

Washington University in St. Louis (St. Louis, MO) May 2008
Bachelor of Arts in English, summa cum laude
Minor in Mathematics
Honors thesis: “Assertion-Through-Structure: The Degenerated Carnival in Joyce and Pynchon”

Rensselaer Polytechnic Institute (Troy, NY) Sep. 2003–May 2005
Coursework in Mathematics and Computer Science, GPA 3.94

PUBLICATIONS:

Book:
Language and the Rise of the Algorithm. University of Chicago Press, Nov. 2022. 2022

Peer-Reviewed Journal Articles:
Binder, Jeffrey M. “The Datafication of Culture: Romanticism and AI-Generated Poetry.” 2022
The Wordsworth Circle 53, no. 3 (Summer 2022): 354-73

Binder, Jeffrey M. “Romantic Disciplinarity and the Rise of the Algorithm.” 2020
Critical Inquiry vol. 46, no. 4, Summer 2020, pp. 813–34.

Binder, Jeffrey M. “The Eighteenth-Century Elocution Movement and Facebook: Reading Emotion Before and After the Subject.” *Media Culture and Society*. Published online Aug. 18, 2019. 2019

Binder, Jeffrey M. “‘The General Practice of the Nation’: Walt Whitman, Language, and Computerized Search in the Nineteenth-Century Archive.” *American Literature*, vol. 88, no. 3, Sep. 2016, pp. 447-75. 2016

Binder, Jeffrey M. and Collin Jennings. “‘A Scientifical View of the Whole’: Adam Smith, Indexing, and Technologies of Abstraction.” *ELH*, vol. 83, no. 1, Spring 2016, pp. 157-180. 2016

Binder, Jeffrey M. and Collin Jennings. “Visibility and Meaning in Topic Models and Eighteenth-Century Subject Indexes.” *Literary and Linguistic Computing*, vol. 29, no. 3, Sep. 2014, pp. 405-411. 2014

Book Chapters:

Binder, Jeffrey M. “Babbage and Algorithmic Thinking.” *The Cambridge Companion to Charles Babbage*, edited by Lukas Verburgt, under contract with Cambridge University Press. Under Contract

Binder, Jeffrey M. "Alien Reading: Text Mining, Language Standardization, and the Humanities." 2016
Debates in the Digital Humanities 2016, edited by Matthew K. Gold and Lauren F. Klein,
 University of Minnesota Press, 2016, pp. 201-217.

Other Writing:

Binder, Jeffrey M. Book Review: *Algorithmic Culture Before the Internet* by Ted Striphas. Forthcoming 2023
 Invited by *Technology and Culture*.

Binder, Jeffrey M. "The Artifice of AI: Why Machine-Generated Text Seems So Fake." 2023
Los Angeles Review of Books, May 5, 2023. lareviewofbooks.org/article/the-artifice-of-ai-why-machine-generated-text-seems-so-fake

Binder, Jeffrey M., and Collin Jennings. "Cultures of Visualization: Adam Smith's Index and Topic Modeling." *Association for Computers and the Humanities*, ach.org/2013/12/30/cultures-of-visualization-adam-smiths-index-and-topic-modeling. 2013

TEACHING EXPERIENCE:

New York University (New York, NY) Fall 2023

Topics in Digital Humanities: Digital Literary Studies (Graduate English 1972)

Course description (condensed): This course combines practical instruction in computational text analysis, including topic modeling, syntactic analysis, and neural language models, with a consideration of the history of these technologies.

Pennsylvania State University (University Park, PA) Fall 2019, Fall 2020, Spring 2022

What is Information? (Communication/IST 170N)

Course description (condensed): "What is Information?" considers the material and social nature of information in historical and contemporary contexts. Integrating perspectives from the social sciences and the humanities, the course prepares students for a world in which information plays an increasingly important social and political role. Co-taught with Josh Shepperd in Fall 2019 and with Keren Wang in Spring 2022, solo in Fall 2020.

Text Analysis and the Humanities (CHI Graduate/Postdoctoral Colloquium) Spring 2019

Colloquium description (condensed): This colloquium explores the methodological and disciplinary implications of computational text analysis by examining case studies of Digital Humanities projects alongside theoretical, critical, and historical discussions of quantitative methods.

Hunter College, City University of New York (New York, NY) Fall 2014; Spring 2015, 2016, and 2017

Introduction to Writing About Literature (English 220)

Course description (condensed): Analytical writing and close reading in British and American fiction, drama, poetry, and literary criticism, with an emphasis on further development of critical writing and research skills.

Expository Writing (English 120) Fall 2015 and 2016

Course description (condensed): Through reading, discussions, writing, and rewriting, English 120 teaches students to generate, explore, and refine their own ideas; to analyze and evaluate intellectual arguments; to develop thesis statements and support them persuasively; and to write with standard acceptable grammar and coherence.

Rensselaer Polytechnic Institute (Troy, NY)

Data Structures and Algorithms (Computer Science 2300)

Fall 2004–Spring 2005

Teaching Assistant

This Sophomore-level class is a core part of the Computer Science curriculum. As an undergraduate TA, I assisted students with lab assignments and graded their work.

DIGITAL HUMANITIES PROJECTS:

PromptArray

2021–

<https://github.com/jeffbinder/promptarray>

Developer. A new method for controlling neural-network text generators that enables users to incorporate operators such as "or" and "not."

A Hundred Visions and Revisions

2019–

<https://github.com/jeffbinder/visions-and-revisions>

Developer. A computer program that rewrites poems to be about different topics using a neural network, maintaining the original rhyme and meter. This program is part of a creative–critical project in which I am exploring the relation of computational language models to ideas of banality.

The Distance Machine

2014–

<http://distancemachine.org>

Developer. A Web-based tool to identify words in a text that were uncommon at a given point in time, using data about historical word usage in Google Books; it also provides easy access to information from historical dictionaries.

The Networked Corpus

2011–2016

<http://www.networkedcorpus.com>

Developer, in collaboration with Collin Jennings. A computer program that allows for the visual comparison of multiple condensed representations of a text, including subject indexes and the results of the statistical method known as topic modeling.

bursts

2012

<http://cran.r-project.org/web/packages/bursts>

Developer, maintainer. A package for the R statistical computing environment that implements Jon Kleinberg's burst detection algorithm, which can be used to identify periods of increased activity in a stream of data.

GRANTS AND AWARDS:

The Robert Adams Day Prize for the Best Dissertation Involving Interdisciplinary Work 2018

New Media Lab History and Public Health Award for “Reading With Emotion in the Eighteenth Century” 2018

CUNY Provost’s Digital Innovation Grant for “The Distance Machine” Fall 2016–Spring 2017

Mellon Digital Scholarly Publishing Fellowship Fall 2015–Spring 2016

CUNY ARC Student Fellowship for “The Distance Machine” Fall 2014

NYU Digital Commons Initiative Grant for “The Networked Corpus” Fall 2012–Spring 2013

NYU DCI Travel Grant, HathiTrust Research Center UnCamp, Indiana University 2012

Highest Distinction in English, Washington University 2008

Scholarship, James Joyce Summer School, University College Dublin 2007

INVITED PRESENTATIONS:

“AI Ethics and Racial Justice.” 2021
Sapphire Leadership Academic Program, Penn State University (University Park, PA)

“Implementing Historical Algorithms.” 2019
Columbia University Python User Group (New York, NY)

“Poetry and Science Before the ‘Two Cultures’: William Wordsworth and George Boole.” 2018
PSU Information + Humanities Conference (University Park, PA)

Panel Participant: “Fuzzy Data: Coding the Humanities.” 2017
Hunter College Center for Teaching and Learning (ACERT) Seminar (New York, NY)

Panel participant: “Books Matter: Circulating Digital and Printed Texts.” 2015
CUNY GC Friday Forum (New York, NY)

CONFERENCE PARTICIPATION:

“Language and the Rise of the Algorithm” (book panel presentation). 2023
North American Society for the Study of Romanticism 2023 (Huntsville, TX/Online)

- “AI and Standardized Testing: From Imitation to Scoring.” 2022
Society for the History of Technology (SHOT) 2022 (New Orleans, LA)
- “‘Mere Nonsense and Unintelligible Jargon’: Clarity, Confusion, and Deception in Eighteenth-Century Mathematics.” 2022
American Society for Eighteenth-Century Studies (ASECS) 2022 (Baltimore, MD)
- “The Politics of Descriptivism in the Age of Artificial Intelligence.” 2022
Modern Language Association (MLA) 2022 (Washington, DC/Online)
- “The Anti-Poetics of Neural-Network Language Models.” 2021
Modern Language Association (MLA) 2021 (Online)
- “Hobbes, Wallis, and the Muteness of Symbols.” Conference Cancelled 2020
International Society for Intellectual History (ISIH) 2020 (Florence, Italy)
- “Intelligence and the Algorithmically Generated Poem: John Peter, Joseph Addison, Ada Lovelace” 2019
North American Society for the Study of Romanticism (NASSR) 2019 (Chicago, IL)
- “Babbage and Poe on the Incomprehensibility of Algorithms.” 2018
Society for Literature, Science, and the Arts (SLSA) 2018 (Toronto, ON)
- “Wordsworth, Disciplinarity, and ‘Poetical Science.’” 2018
North American Society for the Study of Romanticism (NASSR) 2018 (Providence, RI)
- “Lord Stanhope, Coleridge, and the Enlightenment Reasoning Machine.” 2018
American Comparative Literature Association (ACLA) 2018 (Los Angeles, CA)
- “‘Prejudice’ and the Idea of Culture in the Eighteenth Century: Condillac, Maupertuis, Herder.” 2018
American Society for Eighteenth-Century Studies (ASECS) 2018 (Orlando, FL)
- “The Archaeology of Novelty: Revolution, Neology, and the Politics of Reading.” 2017
Northeastern Modern Language Association (NEMLA) 2017 (Baltimore, MD)
- “The Distance Machine: A New Tool for Visualizing Language Change.” 2015
ADE STS 2015 Joint Conference (Lincoln, NE)
- “‘A Talisman of Superstition’: Coleridge and the Prophetic Machine.” 2015
2015 CUNY English Student Association Conference: Trance (New York, NY)
- “Cultures of Visualization: Adam Smith’s Index and Topic Modeling.” 2014
 With Collin Jennings. *Modern Language Association (MLA) 2014* (Chicago, IL)
- “18th- and 21st-Century Genres of Topical Knowledge.” 2013
 Written with and presented by Collin Jennings. *DH 2013*, University of Nebraska (Lincoln, NE)
- “The Networked Corpus.” With Collin Jennings. *THATCamp NYC*, Fordham University (New York, NY) 2012
- “Pluralism, Voting, and the Universal.” *Strategies of Critique*, York University (Toronto, ON) 2011

SELECTED WORK EXPERIENCE:

The Graduate Center, City University of New York (New York, NY)

Writing Across the Curriculum Fellow, Queens College

Fall 2017–Spring 2018

Conducted interviews for an environmental study of the writing centers across the CUNY system; performed data analysis and assisted in writing a report about the availability of writing intensive courses in each major at Queens College.

The Graduate Center, City University of New York (New York, NY)

Digital Fellow

Aug. 2015–May 2016

Managed the team that developed the initial curricula for the MA in Digital Humanities and MS in Data Analysis and Visualization degree programs at the Graduate Center; taught workshops on NLTK, MALLET, MySQL, regex, and other technical skills.

New York University School of Medicine (New York, NY)

Data Analyst

Created a database tracking articles that cite the institution's research publications, and developed a Web-based system for visualizing the citation and co-authorship networks.

Sep. 2010–Aug. 2013

Nature Publishing Group (New York, NY)

Editorial Data Analyst

Gathered and analyzed data on how people use the navigation features of online versions of journals, and developed an internal Web site with charts of the results.

Jan. 2009–Aug. 2010

ACADEMIC SERVICE:

Selection Committee, Center for Humanities and Information, Penn State University

Took part in reviewing applications for predoctoral, postdoctoral, and faculty fellowships.

Fall 2019–Spring 2022

Member, Website Committee, English Students Association, The Graduate Center

Responsible for updating and improving the English Students Association website.

Fall 2017–Spring 2018

Member, CUNY Graduate Center Digital Fellows

Assisted in designing the tentative curricula for the new MA in Digital Humanities and MS in Data Analysis and Visualization degree programs at the Graduate Center. Taught workshops on text analysis, database management, and other topics in digital humanities.

Fall 2015–Spring 2016

Peer Reviewing

Essays in Romanticism

Digital Scholarship in the Humanities

SKILLS:

Programming languages: C/C++, Swift, Objective-C, Python, R, PHP, JavaScript, Scheme, Haskell

Markup and database languages: HTML, XML, TEI, CSS, SQL, LaTeX

Graphics and audio: Photoshop, Illustrator, Audacity

Languages: French (intermediate), German and Latin (reading knowledge)

REFERENCES:

Eric Hayot, Distinguished Professor of Comparative Literature and Asian Studies, Pennsylvania State University

Email: ehayot@psu.edu

Alexander Schlutz, Associate Professor of English, The Graduate Center, CUNY

Email: aschlutz@jjay.cuny.edu

Matthew K. Gold, Associate Professor of English and Digital Humanities, The Graduate Center, CUNY

Email: mgold@gc.cuny.edu

Joshua Wilner, Professor of English and Comparative Literature, The Graduate Center, CUNY

Email: jwilner@gc.cuny.edu