

**JEFFREY M. BINDER**

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**CURRENT POSITION:**

*Intellistack (formerly Formstack) (remote)* May 2024–  
**Principal Data Scientist**  
Developing and deploying ML models for semantic classification of database fields.

**EDUCATION AND ACADEMIC POSITIONS:**

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

*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”

**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, pp. 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 Verburg, under contract with Cambridge University Press. Under Contract

Binder, Jeffrey M. "Edgar Allan Poe, the Mechanical Turk, and Technological Purism." 2026  
*Dis/Trusting the Digital World in Imaginative Literature*, edited by Adam Kelly and Katerina Pavlidi, Edinburgh University Press, 2026, pp. 125-145.

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. 2023  
*Technology and Culture*, vol. 64, no. 4, Oct. 2023, pp. 1362-63.

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](http://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." 2013  
*Association for Computers and the Humanities*, [ach.org/2013/12/30/cultures-of-visualization-adam-smiths-index-and-topic-modeling](http://ach.org/2013/12/30/cultures-of-visualization-adam-smiths-index-and-topic-modeling).

**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

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

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

<https://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 and Writing”/“How I Got There: The Scholarly Path to *Language and the Rise of the Algorithm.*” 2024  
*AI in/and Humanities series, University of Florida (Gainesville, FL)*
- “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:**

- “Thomas Bayes, Machine Learning, and the ‘Ought’ of Computation.” 2024  
*American Society for Eighteenth-Century Studies (ASECS) 2024 (Toronto, ON)*
- “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:

- Open Raven (Los Angeles, CA/remote)*  
**Senior Data Scientist** May 2022–May 2024  
 Developing automated methods for detecting sensitive data in petabyte-scale cloud instances.
- 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, MALLETT, MySQL, regex, and other technical skills.
- New York University School of Medicine (New York, NY)*  
**Data Analyst** Sep. 2010–Aug. 2013  
 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.
- Nature Publishing Group (New York, NY)*  
**Editorial Data Analyst** Jan. 2009–Aug. 2010  
 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.

### ACADEMIC SERVICE:

- Selection Committee, Center for Humanities and Information, Penn State University** Fall 2019–Spring 2022  
 Took part in reviewing applications for predoctoral, postdoctoral, and faculty fellowships.
- Member, Website Committee, English Students Association, The Graduate Center** Fall 2017–Spring 2018  
 Responsible for updating and improving the English Students Association website.
- Member, CUNY Graduate Center Digital Fellows** Fall 2015–Spring 2016  
 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.

**Peer Reviewing**

National Science Centre of Poland  
University of Chicago Press  
*Journal of the Midwest Modern Language Association*  
*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](mailto:ehayot@psu.edu)

Alexander Schlutz, Associate Professor of English, The Graduate Center, CUNY  
Email: [aschlutz@jjay.cuny.edu](mailto:aschlutz@jjay.cuny.edu)

Matthew K. Gold, Associate Professor of English and Digital Humanities, The Graduate Center, CUNY  
Email: [mgold@gc.cuny.edu](mailto:mgold@gc.cuny.edu)

Joshua Wilner, Professor of English and Comparative Literature, The Graduate Center, CUNY  
Email: [jwilner@gc.cuny.edu](mailto:jwilner@gc.cuny.edu)