

Christopher A. Lindgren

Department of English
Shanks Hall, #207
Virginia Tech
Blacksburg, VA 24060
lindgren@vt.edu
clndgrn.com

Education

*University of
Minnesota
Writing Studies*

Ph.D. in Rhetoric and Scientific and Technical Communication, 2017

Dissertation Ways with data: Understanding coding as writing

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Summary: What might be learned about coding, if writing researchers explore the consequences of making language material and computational in a digital medium? This question guided my case-study of a developer, "Ray," whose coding helped reporters tell stories with data. I used ethnographic and grounded-theory methods to garner an emic perspective of coding as a writing practice within this journalism context. I then cross-referenced this data with data collected with finer-grained methods to develop etic findings about coding as writing. Findings from an analysis of Ray's situated coding across multiple projects indicated how his coding involved meaning-making strategies mediated by the structures, formats, and other modes of the data, which supported his contextualizing of the data for the story's purposes.

Committee: Christina Haas (Advisor), Richard Graff, Patrick Bruch, and Sashank Varma (Outside member, Educational Psychology)

*North Dakota
State University
English*

M.A. in Composition Studies, 2012

B.A. in English Studies, 2004

Appointments

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*Virginia Tech,
Department of
English*

Assistant Professor of Technical Communication and Data Visualization
2017 – present

Publications

in-progress

Coding surfaces, surfacing code: On writing with data. Book manuscript that puts historical arcs of computer coding into direct attention with an ethnographic case-study of a web developer, "Ray," and his coding activity on a data journalism team. The book is divided into two main parts and develops a theory about how digital computers have always been a surface dedicated to the programmatic

writing with and of data. Part one historicizes the science and engineering that made the computer a surface for writing with data at greater scale and speed. It connects past coding practices with punch cards, prior to programming languages, with Ray's contemporary practice. Part two provides a thick description of Ray's accrued sense of data and how to transform data across multiple modes with code. Overall, it will provide empirical weight to past studies of coding that have argued how code does not merely mean or do "what it says" by describing the rhetorical depth of coding as a situated writing activity. Plans to submit book prospectus with 3 of 6 chapters by Fall 2020.

Ridolfo, Jim & Chris Lindgren. Rhetmap.org: Composing data for future re-use and visualization. *Kairos*. Accepted and under final review for special issue on "Writing and Data Visualization."

Writing with data: A case of a coder's data sense. *Written Communication*. Revise and resubmit.

nttc: Name That Twitter Community!: A Python module for humanities researchers. [Reviews in DH](#). Submitted for review 09/2019.

Ethical tactics for coding literacy. Revising conference paper for submission to *Literacy in Composition Studies* by early Spring 2020.

Aggregate perspectives: Linking the interpretative levels of data sets to data visualization. Preparing manuscript for *Technical Communication Quarterly* by Summer 2020.

refereed

Baniya, Sweta G., Hutchinson, Les, Kumari, Ashanka, Larson, Kyle, and Chris Lindgren. (2019). Representing diversity in digital research: Digital feminist ethics and resisting dominant normatives. In C. Chen, K. Purzycki, & L. Wilkes (Eds.), *The Proceedings of the Annual Computers and Writing Conference*. Fort Collins, CO: WAC Clearinghouse. Available at <https://wac.colostate.edu/resources/wac/proceedings/cw2018/>.

Brooks, Kevin & Chris Lindgren. (2015). Responding to the coding crisis: From 'Code Year' to computational literacy. In L. C. Lewis, (Ed.), *Strategic Discourse: The Politics of (New) Literacy Crises*. Salt Lake City, UT: Computers and Composition Digital Press. Available at <http://ccdigitalpress.org/strategic/index.html>.

Brooks, Kevin, Chris Lindgren, & Matthew Warner. (2015). Tackling a fundamental problem: Using digital labs to build a smarter computing culture. In B. Hart-Davidson & J. Ridolfo, (Eds.), *Rhetoric and the Digital Humanities*. Chicago, IL: University of Chicago Press.

Hawk, Byron, Chris Lindgren, & Andrew Mara. (2015). Utopian Laptop Initiatives: From technological deism to object-oriented rhetoric. In Sidney Dobrin, (Ed.). *Writing*

Posthumanism, Posthuman Writing. Anderson, SC: Parlor Press.

- book reviews* (2013). BASIC coding cultures. [Review of the book *10 PRINT CHR\$(205.5+RND(1)); : GOTO 10*, by N. Montfort, P. Baudoin, J. Bell, I. Bogost, J. Douglass, M. C. Marino, M. Mateas, C. Raes, M. Sample, & N. Vawter. *Enculturation*, 16. Available at <http://enculturation.net/10-print>.
- non-refereed* (22 Aug. 2016). Exploring #RSA16 Twitter data. [Invited guest blog post]. *The Coalition of Feminist Scholars in the History of Rhetoric and Composition*. Available at <http://cwshrc.org/blog/2016/08/22/inventing-new-ways-with-twitter-data>.
- (30 Jun. 2015). Interview with digital rhetorician Estee Beck on algorithmic surveillance. *Institute of Advanced Study: CodeWork Collaborative*. University of Minnesota. Available at http://umncodework.github.io/past_events/codework-interview-beck-digrhet-surveillance/.
- (15 Jun. 2015). Interview with new media artist Daniel Temkin on esolangs. *Institute of Advanced Study: CodeWork Collaborative*. University of Minnesota. Available at http://umncodework.github.io/past_events/codework-interview-temkin-esolangs/.

Presentations

- invited* (Nov. 2018). Writing with data: A case of a coder's data sense on a data-journalism team. *STS Seminar*. Department of Science, Technology, and Society, Virginia Tech.
- (Jan. 2016). Code literacy. *Critical Code Studies Working Group* (Online, dialogic conference). The Humanities and Critical Code Studies Lab, University of Southern California.
- (Oct. 2014). The dynamic materialities of computer programming practices. *ACM SIGDOC*. Colorado Springs, CO.
- (Mar. 2014). Critical code studies roundtable. *Digital Arts, Sciences, and Humanities*. University of Minnesota: Digital Library Services.
- conferences* (March 2019). Ethical tactics for coding literacy. *NCTE CCCC*. Pittsburgh, PA.
- (May 2018). Invention and quantification: Finding stories with digital data. *Rhetoric Society of America*. Minneapolis, MN.
- Baniya, Sweta G., Hutchinson, Les, Kumari, Ashanka, Larson, Kyle, and Chris Lindgren. (May 2018). Roundtable on Representing diversity in digital research: Digital feminist ethics and resisting dominant normatives. *Computers & Writing*. Fairfax, VA.
- (Feb. 2018). Finding stories with data through computer coding. *Symposium on*

Communicating Complex Information. East Carolina University, Greenville, NC.

(Sep. 2016). Understanding big data processing as designing provisional texts. *ACM SIGDOC: Student Research Competition*. Silver Springs, MD.

(May 2016). How do you know what they are doing? Researching the rhetorics of action and procedure with an embodied and distributed methodology. *Rhetoric Society of America*. Atlanta, GA.

(Oct. 2015). Writing practices anchored by links. *WIDE-EMU*. Michigan State University, East Lansing, MI.

(May 2014). Swapping gender and negotiating differences through data structures. *Rhetoric Society of America*. San Antonio, TX.

(Feb.-Mar. 2014). 'Genderswapping' or 'misgendering'? A question of 'Jailbreaking the Patriarchy'. *Critical Code Studies Working Group (discussion thread leader)*. The Humanities and Critical Code Studies Lab, University of Southern California.

Haas, Christina & Chris Lindgren. (February 2014). Panel co-respondent. The material turn in Writing Studies. *Writing Across Borders III*. Paris, France.

(Oct. 2013). The rhetorical influence of Google's ecosystem of APIs on web developer practices. *Western States Rhetoric & Literacies*. Salt Lake City, UT.

(Apr. 2013). The performative stylistics of glitching video codecs. *Doing Rhetoric at the U*. Minneapolis, MN.

(Mar. 2013). Building a smarter computing culture with proceduracy. *NCTE CCCC*. Las Vegas, NV.

(Dec. 2012). De-boxing Pandora: Tinkering with glitch art methodologies. *GLI.TC/H*. Chicago, IL.

Brooks, Kevin, Chris Lindgren, Emily Bartz, and Jade Sandbulte. (Nov. 2012). The techno-social politics of the Sugar OS: An afterschool computer program case study." *Great Plains Alliance for Computers and Writing*. Mankato, MN.

Brooks, Kevin and Chris Lindgren. (May 2011). Participating in OLPC: Visions for Computers and Writing. *Computers and Writing*. University of Michigan.

Lindgren, Chris, Abigail Bakke, Sreerupa Sengupta, & Karen Sorenson. (October 2010). Second Life and Writing in the Design Professions. *Great Plains Alliance for Computers and Writing*. North Dakota State University.

workshops &
symposiums

(Nov. 2018). Analytical coding workshop. Virginia Tech, Center for Rhetoric in Society.
Co-designed with guest scholar Dr. Cheryl Geisler.

(Oct. 2018). Mock job interview workshop. Virginia Tech, Department of English.

(Oct. 2017). Resume workshop. Virginia Tech, Department of English.

(May 2016). DITA and writing with content reuse in mind. *Advanced Writing Symposium*. University of Minnesota-Twin-Cities, Department of Writing Studies.

(Dec. 2014). Setting up your online portfolio website & basic HTML and CSS. *Professional Development Workshop Series*. University of Minnesota-Twin-Cities, Department of Writing Studies.

(Oct. 2014). Constructing your professional web presence. *Professional Development Workshop Series*. University of Minnesota-Twin-Cities, Department of Writing Studies.

(Feb.-Mar. 2012). *Critical Code Studies Working Group (participant)*. The Humanities and Critical Code Studies Lab, University of Southern California.

Lindgren, Chris & Rebecca Hayes. (Oct. 2011). Seeing and constructing visual arguments in online spaces. *Innovation in the Composition Classroom: Ways to Incorporate Digital Tools*. North Dakota State University.

(Aug. 2011). The GeoProfile Project: Stories cutting across maps. *English Department Teachers Orientation Workshop*. North Dakota State University.

(Aug. 2010). Online writing spaces with Weebly.com. *English Department Technologies Workshop*, North Dakota State University.

Teaching

Virginia Tech

Spring 2020	ENGL 6344 Rhetoric in Digital Environments ENGL 4814 Rhetoric and Content Strategy
Spring 2019	ENGL 4874 Feminisms and Interaction Design ENGL 4814 Rhetoric and Content Strategy
Fall 2018	ENGL 4814 Rhetoric and Content Strategy ENGL 3844 Writing and Digital Media
Spring 2018	ENGL 5674 Rhetoric of Science and Technology ENGL 3844 Writing and Digital Media
Fall 2017	ENGL 3844 Writing and Digital Media (x2)

<i>University of Minnesota</i>	Spring 2017	WRIT 3562W Technical and Professional Writing
	Fall 2016	WRIT 3577W Rhetoric, Technology, and the Internet
	Spring 2016	WRIT 3562W Technical and Professional Writing
	Fall 2015	WRIT 4662W Writing with Digital Technologies
	Spring 2015	WRIT 3577W Rhetoric, Technology, and the Internet
	Fall 2014	WRIT 3577W Rhetoric, Technology, and the Internet
	Fall 2012	WRIT 1301 University Writing
<i>North Dakota State University</i>	Fall 2009 – Spring 2012	ENGL 110 Composition I (2 sections per semester)

Pertinent Experiences

Linger Ink Freelance Writer and Editor, 2005 – 2012

- Collaborated with marketing teams on branding campaigns by developing ideas and copy for web, brochures, media kits and radio scripts;
- Developed websites and content for small businesses; and
- Wrote and edited professional documents, such as grants, proposals, and press releases.

Awards & Fellowships

1st Place. Student Research Competition. (Sep. 2016). Understanding big data as designing provisional texts: A case of how an aggregate narrative was made. Poster and presentation judged at *Special Interest Group on the Design of Communication*.

21st Century Summer Research Fellow. (Summer 2016). Department of Writing Studies and Graduate School, University of Minnesota.

Graduate Research Partnership Program Fellow. (Summer 2015). Department of Writing Studies and Graduate School, University of Minnesota.

RSA Social Media Fellow. (May 2014). Rhetoric Society of America.

James I. Brown Fellow. (Summer 2014). Department of Writing Studies, University of

Minnesota.

Medtronic/Industrial Affiliates Program Fellow. (Spring 2014). Department of Writing Studies, University of Minnesota and Medtronic.

James I. Brown Fellow. (Spring 2013). Department of Writing Studies, University of Minnesota.

Grants

Niles Grant. (Summer 2019). Virginia Tech, CLAHS Faculty Grants. [Not Funded \$4,000]

Faculty Mentoring Grant. (Fall 2018). *Virginia Tech*. [Funded \$1,500]

Niles Grant. (Fall 2017). Virginia Tech, CLAHS Faculty Grants. [Not Funded \$4,000]

Schell, Justin, Lindgren, Chris, Link, Alison, & Jeffrey Kerzner. (2014-15). CodeWork: Exploring Digital Studies through code. *Institute for Advanced Study: Research and Creative Collaborative*, University of Minnesota. [Funded: \$10,000]

Brooks, Kevin, Slator, Brian, & Chris Lindgren. (2011-12). Sugar on a Stick: Establishing a Smart Computing Culture in Fargo. *Community Projects Award: NDSU Office of the President*. [Funded: \$20,000]

Graduate Committees

Ph.D.

Committee Reader. Matthew Homer, (title TBD).

Committee Reader. Kelly Scarff, *Citizen advocacy: A rhetorical study of the relationship between citizens and science* (tentative title).

Committee Reader. Andrew Kulak, *Internet ontology and the future of digital rhetoric*. (Graduated Spring 2019).

M.A.

Committee Reader. Zach Thomas, *Embodied rhetorics*. (Graduated Spring 2019).

Advisor. Jonathan Harding, *Student perceptions of screencasted feedback*. (Graduated Spring 2018).

Service

international

Reviewer for *International Journal of SocioTechnology and Knowledge Development*.

national

Founder and Co-Organizer. Special Interest Group on the Writing and Rhetorics of Code. *Conference on College Composition & Communication*.

Reviewer for *Written Communication*, *Present Tense*, and *Itineration*.

departmental Member, Executive Committee (2019-current)
 Member, PhD Program Committee (2017-current)
 Member, Professional and Technical Writing Program Committee (2019-current)
 Member, Professional and Technical Writing Sub-Committee (2018-19)
 Member, Recruitment Committee (2017-current)
 General Education (Pathways) Course Redesign: Writing and Digital Media (ENGL 3844, Summer 2018)
 Co-planned redesign of department's Digital Studio classroom (Spring 2018)
 Organized Guest Scholar Visit: Dr. Annette Vee (Fall 2018)
 PhD Application Review Committee (Spring 2018)

Affiliations

ACM - Special Interest Group on the Design of Communication
 Association of Teachers of Technical Writing
 HASTAC Scholar
 NCTE
 Rhetoric Society of America

Languages

human Mandarin (2 years of coursework)

human/machine HTML5/CSS3 (Advanced)
 DITA (Intermediate)
 Javascript (Intermediate)
 Node.js (Novice)
 Python (Intermediate)
 PHP (Novice)
 R (Novice)
 Java (Novice)

Proficiencies

computational	Jupyter notebooks, RStudio
video	Adobe Premiere, Kdenlive, iMovie
graphic/image	Adobe Suite, Kira, Inkscape, FFMPEG/Imagick
audio	Ableton Live, Adobe Audition, Audacity
course management	Blackboard, Canvas, Moodle
version control	git/Github, FTP