

R. Stuart Geiger

Curriculum Vitae

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Education:

- **Ph.D., Information Management & Systems with a Designated Emphasis in New Media, University of California, Berkeley** (Dec 2015)
 - **Doctoral Thesis:** robots.txt: An Ethnographic Investigation of Automated Software Agents in User-Generated Content Platforms
 - **Advisor:** Jenna Burrell
 - **Dissertation committee:** Jenna Burrell, Paul Duguid, Coye Cheshire, and Eric Paulos
- **M.A., Communication, Culture, and Technology, Georgetown University** (May 2009)
 - **Master's Thesis:** Working within Wikipedia: Infrastructures of Knowing and Knowledge Production
 - **Advisor:** David Ribes
- **B.A., Humanities Honors, University of Texas at Austin** (May 2007)
 - **Senior Thesis:** Democracy in Wikipedia
 - **Advisor:** Elizabeth Keating

Employment:

- **Postdoctoral scholar**, UC-Berkeley Institute for Data Science (January 2016 to present)

Research Interests and Methods:

- **Disciplinary:** media and communication studies, science and technology studies (STS), social informatics, computer-supported cooperative work (CSCW), data science studies, critical algorithm studies, organizational sociology, critical human-computer interaction (HCI)
- **Theoretical:** socio-technical systems, situated knowledges, communities of practice, ethnomethodology, symbolic interactionism, distributed cognition, actor-network theory
- **Methodological:**
 - Ethnography, including interviews, participant-observation, and focus groups
 - Archival analysis, including individual and group-based qualitative coding
 - Quantitative collection and analysis of log and trace data with R, SQL, and python
 - Machine learning, including model training, feature engineering, and auditing
 - User interface design, including experimental testing and participatory design
 - Inductive, mixed-methodological approaches to answer complex socio-technical questions and problems using all of the above methods, as appropriate and relevant

Journal Publications and Peer-Reviewed Conference Proceedings:

1. **Geiger, R.S.** and Halfaker, A. (2017). "Operationalizing conflict and cooperation between automated software agents in Wikipedia: A replication and expansion of Even Good Bots Fight." *Proceedings of the ACM on Human-Computer Interaction* (Nov 2017 issue, CSCW 2018 Online First). <https://commons.wikimedia.org/wiki/File:conflict-bots-wp-cscw.pdf>
2. **Geiger, R.S.** (2017). "Beyond opening up the black box: Investigating the role of algorithmic systems in Wikipedian organizational culture." *Big Data & Society* 4(2).
<http://stuartgeiger.com/algoculture-bds.pdf>
3. **Geiger, R.S.** (2016). "Bot-based collective blocklists in Twitter: the counterpublic moderation of harassment in a networked public space." *Information, Communication, and Society* 19(6).
<http://stuartgeiger.com/blockbots-ics.pdf>
4. Matias, N. and **Geiger, R.S.** (2015). "Defining, Designing, and Evaluating Civic Values in Human Computation and Collective Action Systems." In *Proceedings of HCOMP 2014*, Citizen-X Workshop. <http://stuartgeiger.com/defining-civic-values-hcomp-matias-geiger.pdf>
5. **Geiger, R.S.** and Lampinen, A. (2014). "Old Against New, or a Coming of Age? Broadcasting in an Era of Electronic Media." *Journal of Broadcasting and Electronic Media* 58(3).
<http://www.tandfonline.com/doi/full/10.1080/08838151.2014.935855>
6. Halfaker, A., **Geiger, R.S.**, and Terveen, L. (2014). "Snuggle: Designing for Efficient Socialization and Ideological Critique." In *Proceedings of the 2014 ACM Conference on Human Factors in Computing (CHI 2014)*. <http://stuartgeiger.com/papers/snuggle-chi.pdf>
7. **Geiger, R.S.** (2014). "Bots, Bespoke Code, and the Materiality of Software Platforms." *Information, Communication, and Society* 17.
<http://dx.doi.org/10.1080/1369118X.2013.873069>
8. **Geiger, R.S.** and Halfaker, A. (2013). "When the Levee Breaks: Without Bots, What Happens to Wikipedia's Quality Control Processes?" In *Proceedings of the 9th International Symposium on Wikis and Open Collaboration (WikiSym 2013)*. <http://stuartgeiger.com/wikisym13-cluebot.pdf>
9. Romolini, M., S. Record, R. Garvoille, Y. Marusenko, and **R.S. Geiger**. (2013). "The Next Generation of Scientists: Examining the Experiences of Graduate Students in Network-Level Science." *Ecology and Society* 18(3). <http://dx.doi.org/10.5751/ES-05606-180342>
10. **Geiger, R.S.** and Halfaker, A. (2013). "Using Edit Sessions to Measure Participation in Wikipedia." In *Proceedings of the 2013 ACM Conference on Computer Supported Cooperative Work (CSCW 2013)*. <http://www.stuartgeiger.com/cscw-sessions.pdf>
11. Halfaker, A., **R.S. Geiger**, J. Morgan, and J. Riedl. (2013). "The Rise and Decline of an Open Collaboration System: How Wikipedia's reaction to sudden popularity is killing it." *American Behavioral Scientist*. <http://dx.doi.org/10.1177/0002764212469365>
12. Ribes, D., S. Jackson, **R.S. Geiger**, M.C. Burton, and T. Finholt (2013). "Artifacts that organize: Delegation in the distributed organization." *Information and Organization* 23:1-14.
<http://dx.doi.org/10.1016/j.infoandorg.2012.08.001>

13. **Geiger, R.S.**, A. Halfaker, M. Pinchuk, and S. Walling (2012). "Defense Mechanism or Socialization Tactic? Improving Wikipedia's Notifications to Rejected Contributors." In *Proceedings of the 2012 International Conference on Weblogs and Social Media (ICWSM 2012)*. <http://www.aaai.org/ocs/index.php/ICWSM/ICWSM12/paper/view/4657>
14. Ford, H. and **R.S. Geiger**. (2012). "'Writing up rather than writing down': Becoming Wikipedia Literate." In *Proceedings of the 8th International Symposium on Wikis and Open Collaboration (WikiSym 2012)*. New York: ACM Digital Library. <http://www.stuartgeiger.com/becoming-wikipedia-literate.pdf>
15. **Geiger, R.S.**, Y.J. Jeong, and E. Manders (2012). "Black-Boxing the User: Internet Protocol over Xylophone Players." In *Proceedings of the 2012 ACM Conference on Human-Computer Interaction (alt.CHI 2012)*. New York: ACM Digital Library. <http://dl.acm.org/citation.cfm?id=2212785>
16. **Geiger, R.S.** and H. Ford. (2011) "Participation in Wikipedia's Deletion Processes." In *Proceedings of the 7th International Symposium on Wikis and Open Collaboration (WikiSym 2011)*. New York: ACM Digital Library. <http://dx.doi.org/10.1145/2038558.2038593>
17. **Geiger, R.S.** and D. Ribes (2011). "Trace Ethnography: Following Coordination through Documentary Practices." In *Proceedings of the 44th Annual Hawaii International Conference on System Sciences (HICSS)*. <http://dx.doi.org/10.1109/HICSS.2011.455>. Best papernomination.
18. **Geiger, R.S.** and D. Ribes (2010). "The Work of Sustaining Order in Wikipedia: The Banning of a Vandal." In *Proceedings of the 2010 ACM Conference on Computer-Supported Cooperative Work (CSCW 2012)*. New York: ACM Digital Library. <http://dx.doi.org/10.1145/1718918.1718941>
19. **Geiger, R.S.** (2009). "Does Habermas Understand the Internet? The Algorithmic Construction of the Blog/Public Sphere." *Gnovis: A Journal of Communication, Culture, and Technology*. 10(1). <http://stuartgeiger.com/papers/gnovis-habermas-blogpublic-sphere.pdf>
20. **Geiger, R.S.** (2009). "The Social Roles of Bots and Assisted Editing Tools." In *Proceedings of the 5th International Symposium on Wikis and Open Collaboration*. New York: ACM Digital Library. <http://dx.doi.org/10.1145/1641309.1641351>

Book Chapters:

21. **Geiger, R.S.** (2011). "The Lives of Bots." In G. Lovink and N. Tkacz (eds.) In *Wikipedia: A Critical Point of View*. Amsterdam: Institute of Network Cultures. <http://www.stuartgeiger.com/lives-of-bots-wikipedia-cpov.pdf>

Open Source Software Projects:

22. **Geiger, R.S.** (2017). "Getorg: a Python library for querying information and analytics about GitHub organizations." GitHub/Zenodo. <http://doi.org/10.5281/zenodo.1000421>
<https://github.com/getorg/getorg>

23. **Geiger, R.S.**, Paxton, A., and Haines, R. (2017). "Academicpages.github.io: a ready-to-fork GitHub Pages template for personal academic websites." GitHub/Zenodo. <http://doi.org/10.5281/zenodo.1000419> <https://academicpages.github.io>

Talks & Conference Presentations (not including proceedings conferences):

- **Geiger, R.S.** (2017). "Computational Ethnography and the Ethnography of Computation." Talk at the *Berkeley Institute for Data Science*: Berkeley, California. Sep 14, 2017.
- **Geiger, R.S.**, Fiore-Gartland, B. and Cabasse-Mazel, C. (2017). "Jupyter Notebooks and the Changing Rituals around Computation." Presented at *JupyterCon*: New York, New York. Aug 25, 2017.
- **Geiger, R.S.** (2017). "Autoethnographic Methods for Studying Data-Driven Knowledge Production." Presented at the *2017 Annual Meeting of the Society for the Social Study of Science (4S)*: Boston, Massachusetts. Aug 31, 2017.
- **Geiger, R.S.** (2017). "Demystifying Algorithmic Processes: The Case of Wikipedia." Presented at *Platform Law: The 21st Annual Berkeley Center for Law & Technology Symposium*: Berkeley, California. Apr 20, 2017.
- **Geiger, R.S.**, Cullens, C., Cabasse-Mazel, C., and Brady, H. (2016). "Results of the Moore-Sloan Data Science Environments (MSDSE) Survey on Career Paths in Data Science." Presented at the *2016 Data Science Summit*: New York, New York. Oct 26, 2016.
- **Geiger, R.S.** (2016). "'The Wisdom of Bots: An ethnographic study of the delegation of governance work to information infrastructures in Wikipedia." Presented at the *2016 Annual Meeting of the Society for the Social Study of Science (4S)*: Barcelona, Spain. Sep 2, 2016.
- **Geiger, R.S.** (2016). "Community Sustainability in Wikipedia: A Review of Research and Initiatives." Presented at *PyData*: San Francisco, California. Aug 13, 2016.
- **Geiger, R.S.** (2016). "Governing Open Source Projects at Scale: Lessons from Wikipedia's Growing Pains." Presented at *SciPy 2016*: Austin, Texas. Jul 16, 2016.
- **Geiger, R.S.** (2016). "Administrative Support Bots in Wikipedia: How Automation Can Transform the Affordances of Platforms and the Governance of Communities." Presented at *Communicating with Machines* workshop: Fukuoka, Japan. Jun 14, 2016.
- **Geiger, R.S.** (2016). "Drowning in Data: Industry and Academic Approaches to Mixed Methods in "Holistic" Big Data Studies." Panel at the *Annual Meeting of the International Communication Association (ICA 2016)*: Fukuoka, Japan. Jun 11, 2016.
- **Geiger, R.S.** (2016). "Successor Systems: Lessons for Big Data From Feminist Epistemology and Activism." Presented at *Big Data: Critiques and Alternatives* workshop: Fukuoka, Japan. Jun 9, 2016.
- **Geiger, R.S.** (2016). "Algorithms as agents of gatekeeping, governance, and articulation work in Wikipedia." Presented at *Algorithms, Automation, and Politics* workshop: Fukuoka, Japan. Jun 8, 2016.

- Fiore-Gartland, B. and **Geiger, R.S.** (2016). "What the hack?" Hacking culture and discourse in data science pedagogy." Presented at *Theorizing the Web*: New York, New York. Apr 15, 2016.
- **Geiger, R.S.** (2016). "Moderating harassment in Twitter with blockbots: a counterpublic and algorithmic strategy." Presented at *Theorizing the Web*: New York, New York. Apr 15, 2016.
- **Geiger, R.S.** (2015). "The Bot Multiple: Unpacking the Materialities of Automated Software Agents." Presented at the *2015 Annual Meeting of the Society for the Social Study of Science (4S)*: Denver, Colorado. Nov 12, 2015.
- **Geiger, R.S.** (2015). "Bot-Based Collective Blocklists in Twitter: The Counterpublic Moderation of a Privately-Owned Networked Public Space." Presented at *Internet Research 16 (IR 16)*. Sponsored by the *Association of Internet Researchers (AoIR)*: Phoenix, Arizona. Oct 22-24, 2015.
- **Geiger, R.S.** (2015). "But it Wouldn't Be an Encyclopedia; It Would Be a Wiki: Wikipedia and the Repurposing of WikiWikiWeb." Presented at *the Annual Meeting of the International Communication Association (ICA)*, San Juan, Puerto Rico. May 25, 2015.
- **Geiger, R.S.** (2015). "Situated knowledges and successor systems: developing CSCW systems to enact ideological critiques." Presented at CSCW Workshop on *Feminism and Feminist Approaches in Social Computing*, Vancouver, BC. Mar 15, 2015.
- **Geiger, R.S.** (2015). "Does Facebook Have Civil Servants? On Governmentality and Computational Social Science." Presented at CSCW Workshop on *Ethics for Studying Sociotechnical Systems in a Big Data World*, Vancouver, BC. Mar 15, 2015.
- **Geiger, R.S.** (2014). "Successor systems: the role of reflexive algorithms in enacting ideological critique" Presented at the *2014 Annual Meeting of the Society for the Social Study of Science (4S)*: Buenos Aires, Argentina, Aug 20-23, 2014.
- **Geiger, R.S.** (2014). "Successor systems: the role of reflexive algorithms in enacting ideological critique." Presented at *Internet Research 15 (IR 15)*. Sponsored by the *Association of Internet Researchers (AoIR)*: Daegu, South Korea, Oct 22-24, 2014.
- **Geiger, R.S.** (2014). "The Materiality of Bots." Presented at *Robots and New Media*. Sponsored by the Berkeley Center for New Media. Berkeley, CA. Apr 14, 2014.
- **Geiger, R.S.** (2013). "Design by Bot: Power and Resistance in the Development of Automated Software Agents." Presented at *Internet Research 14 (IR 14)*. Sponsored by the *Association of Internet Researchers (AoIR)*: Denver, CO, Oct 23-26, 2013.
- **Geiger, R.S.** (2013). "Hadoop as Grounded Theory: Is an STS Approach to Big Data Possible?" Presented at the *2013 Annual Meeting of the Society for the Social Study of Science (4S)*. Sponsored by the Society for the Social Study of Science: San Diego, CA, Oct 9-12, 2013.
- **Geiger, R.S.** (2013). "Values Where? Interrogating Client-Side Scripting as a Design Process" Presented at *Theorizing the Web*. Sponsored by CUNY Graduate Center: New York, NY, Mar 1-2, 2013.

- **Geiger, R.S.** (2012) "Time to Degree: Examining the Experiences of Graduate Students in the Long-Term Ecological Research Network." Presented at the *2012 Annual Meeting of the Society for the Social Study of Science (4S)*: Copenhagen, Denmark, Oct 17-20, 2012.
- **Geiger, R.S.** and Ford, H. (2012) "Trace literacy: a framework for holistically conceptualizing newcomer socialization in socio-technical systems." Presented at *Infosocial*. Sponsored by the Northwestern Media, Technology, and Society Program: Evanston, IL, Oct 12-13, 2012
- **Geiger, R.S.** (2012) "Improving Wikipedia's Notifications to Rejected Contributors." Presented at *GCOE International Symposium on Informatics Education*. Sponsored by Kyoto University Global Center of Excellence: Kyoto, Japan, Mar 30-31, 2012.
- **Geiger, R.S.** (2011). "User-Generated Platforms in Wikipedian Governance." Paper presented at the *2011 Annual Meeting of the Society for the Social Study of Science (4S)*. Sponsored by the Society for the Social Study of Science: Cleveland, OH, Nov 2-5, 2011.
- **Geiger, R.S.** (2011). "'The Internet is Here': The Virtuality of 'On-line Communities in Physical Spaces." Paper presented at the *2011 Annual Meeting of the Society for the Social Study of Science*. Sponsored by the Society for the Social Study of Science: Cleveland, OH, Nov 2-5, 2011.
- **Geiger, R.S.** (2011). "Machine-Generated Content: Bots and the Governance of Wikipedia." Presented at *Digital Media and Learning 2011*. Sponsored by the DML Central: Long Beach, CA, March 3-5, 2011.
- **Geiger, R.S.** (2010). "The Wisdom of Bots: A Critique of 'Self-Organization' in Wikipedia." Presented at *Critical Point of View: Wikipedia and the Politics of Open Knowledge*. Sponsored by the Centre for Internet and Society: Bangalore, India, January 10-12, 2010.
- **Geiger, R.S.** (2010). "Bot Politics: How is Automation Changing the Wikipedian Society?" Presented at *Critical Point of View II*. Sponsored by the Institute for Networked Cultures: Amsterdam, Netherlands. March 26-27, 2010.
- **Geiger, R.S.** (2009). "Where Are the Missing Wikipedians? The Sociology of a Bot." Paper presented at the *2009 Annual Meeting of the Society for the Social Study of Science*. Sponsored by the Society for the Social Study of Science: Arlington, VA, Oct 28-31, 2009.
- **Geiger, R.S.** and D. Ribes. (2009). "Trace Ethnography: An ANT Method for the Study of Sociotechnical Networks." Presented at the *Second Annual Media Sociology Forum*. Sponsored by New York University: New York, New York, September 25, 2009.
- **Geiger, R.S.** (2009). "Algorithmic Governance: The Social Roles of Bots and Assisted Editing Tools." Presented at the *First Annual Wikiconference NYC*. Sponsored by the Wikimedia Foundation: New York, New York, July 25-26, 2009.
- **Geiger, R.S.** (2009). "Evolving Governance and Media Use in Wikipedia: A Historical Account." Presented at *Media in Transition 6*. Sponsored by Massachusetts Institute of Technology: Cambridge, MA, April 24-26, 2009.
- **Geiger, R.S.** (2009). "Working With/in Wikipedia: Infrastructures of Knowing and Knowledge Production." Presented at the *9th Annual Conference on Science and Technology in Society*.

Sponsored by the American Association for the Advancement of Science: Washington, DC, March 28-29, 2009. Top Paper Award.

- **Geiger, R.S.** (2008). "Conceptions and Misconceptions Academics Hold About Wikipedia." Presented at the *4th Annual Wikimedia Conference (Wikimania 2008)*. Sponsored by the Wikimedia Foundation: Library of Alexandria, Egypt, July 17-19, 2008.
- **Geiger, R.S.** (2008). "A Communicative Ethnography of Argumentative Strategies in a Wikipedian Content Dispute." Presented at *Exploring New Media Worlds*. Sponsored by the National Communication Association and Texas A&M University, Department of Communication: College Station, Texas, Feb 29 - Mar 2, 2008.

Conference Posters:

- **Geiger, R.S.** "Software Agents as Social Agents." Poster presented at the *2013 ACM Conference on Computer Supported Cooperative Work (CSCW 2013)*. Sponsored by the Association for Computing Machinery: San Antonio, TX, Feb 23-27, 2013.
- Ribes, D. and **R.S. Geiger**. (2009). "How are information technologies reshaping collaboration in LTER?" Poster presented at the *Eleventh Annual Meeting of the Baltimore Ecosystem Study*. Sponsored by the Baltimore Ecosystem Study: Baltimore, Maryland, Oct 21-23, 2009.
- Ribes, D., S. Jackson, **R.S. Geiger**, M. Burton, and T. Finholt. (2009). "VOSS: Delegating Organizational Work to Virtual Organization Technologies." Poster presented at the *2009 Annual Meeting of the Long-Term Ecological Research Network*. Sponsored by the Long-Term Ecological Research Network: Estes Park, Colorado, Sept 14-16, 2009.
- **Geiger, R.S.** (2008). "The Wikipedian Discourse: A Foucauldian Analysis of Power Relations." Poster presented at the *94th Annual Convention of the National Communication Association*. Sponsored by the National Communication Association: San Diego, California, November 21-26, 2008.

Teaching Experience:

- **Software Carpentry Instructor** (since May 2016)

Description: Software Carpentry is an international non-profit organization that teaches computing and data science skills to researchers in short, no-cost workshops (2-5 days). Becoming a certified software carpentry instructor involved taking a programming-focused pedagogy course, assisting a veteran instructor with running a workshop, then passing a teaching evaluation in a live classroom setting.

- **Peer learning group coordinator** (Fall 2016, Spring 2017, Fall 2017)

Description: Since Fall 2016, I have led *The Hacker Within*, a peer learning group run out of the Berkeley Institute for Data Science, where learners meet 1.5-2 hours a week to teach each other a new language, library, platform, concept, or other topic related to data science and scientific computing. The group exists to fill in the gaps of the university's standard curricula, give learners a low-risk, low-prerequisite environment to get started with data science, and build a community across campus.

Duties included: Developing the weekly schedule, finding experts to lead each week's session, consulting with session leaders to develop lessons, maintaining computational infrastructure for the group, and outreach to campus and community.

- **Instructor of Record** (Summer 2014)

Class: SOC-167, Sociology of Social Media and Virtual Communities, a 35 person upper-division undergraduate course

Duties included: All duties as instructor of record, including designing an entirely new syllabus with lectures and assignments, as well as supervising one teaching assistant who assisted with grading and logistics.

- **Adjunct Instructor** (Spring 2014)

Class: SOC-167, Sociology of Social Media and Virtual Communities, a 250 person upper-division undergraduate course

Duties included: Taking over the first 1/3rd of the entire class after the instructor resigned one week before the beginning of the semester. With two other adjunct instructors, we designed a new syllabus, assignments, and exams, held office hours, gave 3 hours of lecture per week, and supervised a team of teaching assistants.

- **Graduate Student Instructor** (Spring 2014)

Class: INFO-103, History of Information, a 60 student undergrad course

Duties included: Grading assignments; holding weekly office hours; assisting students with writing and final projects; giving two 1.5 hour lectures per semester.

Reference: Paul Duguid

- **Graduate Student Instructor** (Spring 2012, Spring 2013)

Class: INFO-203, Social Aspects of Information, a 60 student masters-level course

Duties included: Grading assignments; holding weekly office hours; assisting students with writing and final projects; giving two 1.5 hour lectures per semester.

Reference: Jenna Burrell

- **Teaching assistant** (Fall 2009)

Class: CCTP-783, Qualitative Data Analysis, a core methods graduate-level course

Duties included: General logistical work to prepare for classes; working as needed with individual students to develop research agendas, theoretical orientations, and multiple qualitative data analysis techniques.

Reference: David Ribes

- **Teaching assistant** (Fall 2008)

Class: CCTP-505, Introduction to Communication, Culture, and Technology, a required course for first-year graduate students.

Duties included: Holding weekly discussion sessions with an eleven student group to discuss course material and assignments, holding regular office hours, and providing technical support to professors during lectures

Reference: Jeanine Turner and Michael Coventry

Professional Service:

- **Conference organization:**
 - CSCW steering committee member, student position, (2015-2016)
 - CSCW 2017 panels co-chair (2016-2017)
 - Co-organizer for “Critical Data Studies” track at 2016 and 2017 meeting of the Association for the Social Studies of Science
- **Journal organization:**
 - Advisory board member, *Social Media + Society* (2015-)
 - Edited special issue of the *Journal of Broadcasting and Electronic Media* (2013-2014)
- **Workshops and seminar series:**
 - Co-organizer, workshop on Trace Ethnography, iConference 2015
 - Co-organizer, workshop on Hacking and Making at Time-Bounded Events, CSCW 2017
 - Assisted with digitalSTS workshop series (2013-2015)
 - Organizer, “Algorithms as Computation and Culture” seminar series, UC-Berkeley (2014-2015)
- **Conference reviewer for:**
 - ACM Conference on Human Factors in Computing (CHI) and alt.chi
 - ACM Conference on Computer-Supported Cooperative Work (CSCW)
 - AAAI International Conference on Weblogs and Social Media (ICWSM)
 - IEEE Hawaii International Conference on Systems Sciences (HICSS)
 - iConference
 - ACM International Symposium on Wikis and Open Collaboration (WikiSym)
 - International Communication Association conference (ICA)
- **Journal reviewer for:**
 - Journal of CSCW
 - *New Media and Society*
 - *Information, Communication, and Society*
 - *Journal of Broadcasting and Electronic Media*
 - *Social Media and Society*
 - *Science & Technology Studies*

- Journalism
- IEEE Computer
- International Journal of Communication