Peter Organisciak

Large-Scale Text Analysis ♦ Data Mining ♦ Crowdsourcing ♦ Information Retrieval organis2@illinois.edu | 617-383-7674 | www.porganized.com

ACADEMIC HISTORY

Post-doctoral Research Associate, HathiTrust Research Center, 2015-Present.

Focus: Non-consumptive access and tools for research over the 15m book HathiTrust collection

2015 PhD in Library and Information Science, University of Illinois.

Specialization: *Information Storage and Retrieval*. Dissertation: "<u>Design Problems in Crowdsourcing</u>: <u>Improving The Quality of Crowd-Based Data Collection</u>".

Committee: Michael Twidale (advisor), Miles Efron, J. Stephen Downie, Jaime Teevan.

2010 MA in Humanities Computing—Library and Information Studies, University of Alberta.

Thesis: "Why Bother? The motivations of users in large-scale crowd-powered online initiatives".

Committee: Lisa M. Given, Geoffrey Rockwell, and Stan Ruecker.

2008 Honors BA in Communication Studies and Multimedia, McMaster University.

PAPER/CONTRIBUTION AWARDS PI

- Notable Paper, HCOMP 2014
- Outstanding Contribution Award, CSDH-CSHN
- Fortier Prize shortlist, DH 2013; DH 2011
- Best Paper, ASIS&T 2011 (2nd author)
- Best Student Paper, SDH-SEMI 2011

METRICS

H-Index: 8

PUBLICITY"Online crowd can guess what you want to watch or buy", Hal

Hodson, New Scientist, 2989: Oct 02 2014. "It's Out of Africa meets Pretty Woman! The Art and Science of Mixture Descriptions", Katy Waldman, Slate (Lexicon Valley: A Blog about Language): Nov 23, 2015.

INTERNSHIPS

Microsoft Research, Cambridge, MA (2013)

Advised by Adam Tauman Kalai, Jaime Teevan, and Susan Dumais. Worked on subjective crowdsourcing approaches, including techniques for personalization through online crowds.

PUBLICATIONS

Journal Articles

- 1. Xiao Hu, Jin Ha Lee, David Bainbridge, Kahyun Choi, Peter Organisciak, J. Stephen Downie. 2015. "The MIREX grand challenge: A framework of holistic user-experience evaluation in music information retrieval." *Journal of the Association for Information Science and Technology*.
- 2. Sayan Bhattacharyya, Peter Organisciak, J. Stephen Downie. 2015. "A fragmentising interface to a large corpus of digitized text: (Post)humanism and non-consumptive reading via features." *Interdisciplinary Science Reviews (Special Issue on the Future of Reading)*. v.40 (2015).
- 3. Geoffrey Rockwell, Peter Organisciak, Stan Ruecker, Megan Meredith-Lobay, Kamal Ranaweera, Julianne Nyhan. 2012. "The design of an international social media event: A Day in the Life of the Digital Humanities." Digital Humanities Quarterly.
- 4. Geoffrey Rockwell, Stéfan Sinclair, Stan Ruecker, Peter Organisciak. 2010. "Ubiquitous Text Analysis." *Poetess Archive Journal*. v.2.1.

Proceedings Papers

Full-length peer-reviewed papers.

1. David M Weigl, Kevin R Page, Peter Organisciak, J. Stephen Downie. 2017. "Information-Seeking in Large-Scale Digital Libraries: Strategies for Scholarly Workset Creation." 2017 ACM/IEEE Joint Conference on Digital Libraries. Toronto, Canada.

- 2. Peter Organisciak, Boris Capitanu, Ted Underwood, J. Stephen Downie. "Access to Billions of Pages for Large-Scale Text Analysis." *iConference 2017*. Wuhan, China.
- 3. Peter Organisciak, Jaime Teevan, Susan Dumais, Robert C. Miller, Adam Tauman Kalai. 2015. "Matching and Grokking: Approaches to Personalized Crowdsourcing." *International Joint Conferences on Artificial Intelligence*. Buenos Aires, Argentina.
- 4. Peter Organisciak, J. Stephen Downie. 2015. "Improving Consistency of Crowdsourced Multimedia Similarity for Evaluation." *Joint Conference on Digital Libraries 2015.* Knoxville, TN.
- 5. Peter Organisciak, Michael B. Twidale. 2015. "Design Facets of Crowdsourcing." *iConference 2015*. Newport Beach, CA.
- 6. Peter Organisciak, Jaime Teevan, Susan T. Dumais, Robert C. Miller, Adam Tauman Kalai. 2014. "A Crowd of Your Own: Crowdsourcing for On-Demand Personalization." *Proceedings of the Second AAAI Conference on Human Computation & Crowdsourcing (HCOMP 2014)*. Pittsburgh, USA. **Notable Paper**.
- 7. Peter Organisciak, Michael B. Twidale. 2014. "When the Elevator Pitch Meets the Subject Heading: How Mixtures of Other Documents Can Describe What a Document is About." *Proceedings of the American Society for Information Science and Technology (ASIS&T '14)*. Seattle, Washington, USA.
- 8. Peter Organisciak. 2013. "Addressing Diverse Corpora with Cluster-based Term Weighting." *Proceedings of the 13th ACM/IEEE-CS Joint Conference on Digital Libraries (JCDL '13)*. New York, NY, USA.
- 9. Peter Organisciak, Miles Efron, Katrina Fenlon, Megan Senseney. 2012. "Evaluating rater quality and rating difficulty in online annotation activities." *Proceedings of the American Society for Information Science and Technology (ASIS&T '12)*. Baltimore, MD.
- 10. Katrina Fenlon, Miles Efron, Peter Organisciak. 2012. "Tooling the aggregator's workbench: Metadata visualization through statistical text analysis." *Proceedings of the American Society for Information Science and Technology (ASIS&T '12)*.
- 11. Miles Efron, Peter Organisciak, Katrina Fenlon. 2012. "Improving Retrieval of Short Texts through Document Expansion." *Proceedings of the 35th International ACM SIGIR Conference on Research and Development in Information Retrieval (SIGIR '12)*. New York, NY, USA.
- 12. Miles Efron, Peter Organisciak, Katrina Fenlon. 2011. "Building Topic Models in a Federated Digital Library through Selective Document Exclusion." *Proceedings of the American Society for Information Science and Technology (ASIS&T '11)*. New Orleans, USA. **Best Paper**.

Lessons

Peer-reviewed lessons.

1. Peter Organisciak and Boris Capitanu. 2016. "Text Mining in Python through the HTRC Feature Reader," Programming Historian, (22 November 2016), http://programminghistorian.org/lessons/text-mining-with-extracted-features.

Presentations, Extended Abstracts

Peer-reviewed humanities-style paper presentations and computer science-style extended abstracts.

- 1. Peter Organisciak, Loretta Auvil, J. Stephen Downie. 2015. "Remembering books: A within-book topic mapping technique." *Digital Humanities 2015*. Sydney, Australia.
- 2. Peter Organisciak, Loretta Auvil, Sayan Bhattacharyya, J. Stephen Downie. 2015. "The HTRC Extracted Features Dataset." Joint Canadian Society for the Digital Humanities and Association for Computing in the Humanities Conference.
- 3. Peter Organisciak, Sayan Bhattacharyya, J. Stephen Downie. 2014. "Reading via Fragments: Non-consumptive Reading as Practical Necessity and as Post-humanist Performativity." *Experimental Interfaces for Reading 2.0: INKE ID Conference*. Chicago, IL.
- 4. Peter Organisciak. 2013. "Incidental Crowdsourcing: Crowdsourcing in the Periphery." *Digital Humanities* 2013. Lincoln, Nebraska. Fortier Prize shortlist.
- 5. Peter Organisciak. 2012. "A Modest Payment for a Modern Proposal." SDH-SEMI Annual Meeting. Waterloo, Ontario, Canada.
- 6. Peter Organisciak. 2011. "When to ask for help: Evaluating projects for crowdsourcing." *Digital Humanities* 2011. Stanford University, Stanford, USA. Fortier Prize shortlist.

- 7. Milena Radzikowska, Stan Ruecker, Susan Brown, Peter Organisciak, 2011. "Structured Surfaces for JiTR." *Digital Humanities 2011*. Stanford University, Stanford, USA.
- 8. Peter Organisciak, Garry Wong, Calen Henry, Lucio Guiterrez. 2011. "Pico Safari: Active Gaming in Integrated Environments." *Annual Meeting of the Society for Digital Humanities (SDH-SEMI 2011)*. Fredericton, Canada. **Best Student Paper**.
- 9. Peter Organisciak. 2010. "Motivations of Users in Large-Scale Crowd-Powered Online Initiatives." *Chicago Colloquium on Digital Humanities and Computer Science (DHCS '10)*. Evanston, IL, USA.
- 10. Geoffrey Rockwell, Stan Ruecker, Peter Organisciak, Megan Meredith-Lobay, Kamal Ranaweera, Stéfan Sinclair. 2010. "Analyzing A Day in the Life of Digital Humanities." *Digital Humanities 2010.* King's College London, UK.
- 11. Geoffrey Rockwell, Stan Ruecker, Peter Organisciak, Megan Meredith-Lobay, Kamal Ranaweera, Julianne Nyhan. 2010. "What do we say about ourselves? An analysis of the Day of DH 2009 data." *Annual Meeting of the Society for Digital Humanities (SDH-SEMI 2010)*. Concordia University, Montreal, Canada.
- 12. Peter Organisciak, Geoffrey Rockwell, Stéfan Sinclair, Stan Ruecker. 2010. "Text Analysis for me Too: An embeddable text analysis widget." *Annual Meeting of the Society for Digital Humanities (SDH-SEMI 2010)*. Concordia University, Montreal, Canada.
- 13. Peter Organisciak, Kathleen Reed, Alicia Hibbert. 2010. "Shortcuts and Dead Ends: Control Issues With Online User-Generated Content." *Canadian Association for Information Science 2010 (CAIS '10)*. Concordia University, Montreal, Canada.
- 14. Peter Organisciak. 2010. "Collecting Crowds: A Survey-based Introduction to Crowdsourcing." *HuCon 2010: Current Graduate Research in Humanities Computing*. University of Alberta, Edmonton, Canada.
- 15. Stan Ruecker, Geoffrey Rockwell, Susan Brown, Stéfan Sinclair, Peter Organisciak. 2009. "Mashing Texts: Supporting collections level text analysis." *Digital Humanities 09.* University of Maryland, USA.
- 16. Geoffrey Rockwell, Stan Ruecker, Peter Organisciak, Stéfan Sinclair. 2009. "Ubiquitous Text Analysis." *Digital Humanities 09.* University of Maryland, USA.
- 17. Stéfan Sinclair, David Beacon, Susan Brown, J. Stephen Downie, Carlos Fiorentino, Patrick Juola, Peter Organisciak, Geoffrey Rockwell, Susan Schreibman, Kirsten Uszkalo. 2009. "TADA Research Evaluation Exchange: Winning 2008 Submissions." *Digital Humanities 09.* University of Maryland, USA.
- 18. Christine Varnam, Peter Organisciak, Kathleen Reed, Alicia Hibbert, Diana Keto. 2009. "Invasion of the And-Ors: Applying Active Learning Principles in the Development of a Flash-based Boolean Search Tutorial and Game." Canadian Association for Information Science. Carleton University, Ottawa, Canada.
- 19. Geoffrey Rockwell, Stan Ruecker, Peter Organisciak. 2009. "Introducing a Day in the Life of the Digital Humanities." *Annual Meeting of the Society for Digital Humanities (SDH-SEMI 2009)*. Carleton University, Ottawa, Canada.
- 20. Geoffrey Rockwell, Stan Ruecker, Peter Organisciak, Susan Brown, Stéfan Sinclair. 2009. "Exploring New Possibilities in Rapid Research Document Management." *Annual Meeting of the Society for Digital Humanities*. Carleton University, Ottawa, Canada.

Short Papers, Posters, Demos

Peer-reviewed computer-science-style short papers (2-4 page) and humanities-style poster presentations

- 1. Bhattacharyya, Sayan; Merrill, Christi; Organisciak, Peter; Schmidt, Benjamin; Auvil, Loretta; Aiden, Erez Lieberman; Downie, J. Stephen. August 2017. "Big-Data Oriented Text Analysis for the Humanities: Pedagogical Use of the HathiTrust+Bookworm Tool". *Digital Humanities* (DH 2017). Montreal, Canada.
- 2. Peter Organisciak, J. Stephen Downie. 2016. "Trends in Centuries of Words: Progress on the HathiTrust+Bookworm Project." *Annual Meeting of the Japanese Association for Digital Humanities* (JADH 2016). Tokyo, Japan.
- 3. Peter Organisciak, J. Stephen Downie. 2016. "Mining Texts with the Extracted Features Dataset." In *Digital Humanities 2016: Conference Abstracts.* Jagiellonian University & Pedagogical University, Kraków, pp. 938-939.
- 4. Rajan Vaish, Peter Organisciak, Kotaro Hara, Jeffrey P. Bigham, Haoqi Zhang. 2014. "Low Effort Crowdsourcing: Leveraging Peripheral Attention for Crowd Work." *Proceedings of the Second AAAI Conference on Human Computation & Crowdsourcing (HCOMP 2014)*. Pittsburgh, USA.

- 5. Peter Organisciak, Sayan Bhattacharyya, Loretta Auvil, J. Stephen Downie. 2014. "Large-scale text analysis through the HathiTrust Research Center." *Digital Humanities 2014*. Lausanne, Switzerland.
- 6. Harriett Green, Katrina Fenlon, Megan Senseney, Sayan Bhattacharyya, Craig Willis, Peter Organisciak, J. Stephen Downie, Timothy W. Cole, Beth Plale. 2014. "Using collections and worksets in large-scale corpora: Preliminary findings from the Workset Creation for Scholarly Analysis project." *iConference 2014 Proceedings*.
- 7. Peter Organisciak, Jaime Teevan, Susan Dumais, Robert C. Miller, Adam Tauman Kalai. 2013. "Personalized Human Computation." First AAAI Conference on Human Computation and Crowdsourcing (HCOMP). Palm Springs, CA.
- 8. Peter Organisciak. 2012. "An Iterative Reliability Measure for Semi-anonymous Annotators." *Joint Conference on Digital Libraries.* Washington DC, USA.
- 9. Katrina Fenlon, Peter Organisciak, Jacob Jett, Miles Efron. 2011. "Semi-automated Collection Evaluation for Large-scale Aggregations." *Proceedings of the American Society for Information Science and Technology (ASIS&T '11)*. New Orleans, USA.

A Panels, Workshops, Alternative Events

- 1. Rajan Vaish, Peter Organisciak, Markus Krause. *CrowdCamp 2017*. Workshop for HCOMP 2017, Quebec City, Canada.
- 2. Peter Organisciak. 2014. "Feature Extraction." *Chicago Colloquium on Digital Humanities and Computer Science*. Evanston, IL, USA. Part of "HathiTrust Research Center" Panel, with J. Stephen Down, Jacob Jett, Loretta Auvil, and Pip Wilcox.
- 3. Michael B. Twidale, Sally Jo Cunningham, James Howison, Peter Organisciak, Jeff Ginger, Brittany Smith, Ingbert Schmidt. 2013. "Tech Learning Potluck." *iConference 2013*. Fort Worth, Texas. Alternative event.
- 4. Michael B. Twidale, Sunah Suh, Ingbert Schmidt, Peter Organisciak, Jeff Ginger, Jean-François Blanchette, Matthew Ratto, Christopher Lueg. 2012. "Design Jams in iSchools: approaches, challenges and examples." *iConference 2012*. Toronto, Canada. Alternative event.
- 5. Stan Ruecker, Geoffrey Rockwell, Peter Organisciak, Jean-Guy Meunier, Michael Eberle-Sinatra, Alan Galey, Aimee Siemens, Ray Siemens. 2009. "Graduate Education in the Digital Humanities." Society for Digital Humanities 2009. Carleton University, Ottawa, Canada. Panel.

Position Papers

- 1. Peter Organisciak, Rajan Vaish. 2016. "Accomplishing Low-Attention Microtasks." *CHl2016 workshop: Productivity Decomposed: Getting Big Things Done with Little Microtasks.* San Jose, USA.
- 2. Peter Organisciak. 2014. "Reliable Task Design for Descriptive Crowdsourcing." *HCOMP 2014 Doctoral Consortium*. Pittsburgh, PA, USA.
- 3. Miles Efron, Peter Organisciak. 2011. "A Palette Mixing Model of Information Seeking for Complex Queries." *Proceedings of the SIGIR 2011 Workshop on "entertain me": Supporting Complex Search Tasks.* Beijing, China.

Other

- 1. Peter Organisciak. 2015. "The HTRC Extracted Features Dataset." AnalyzeBoulder.
- 2. UIUC team. 2012. "The University of Illinois' Graduate School of Library and Information Science at TREC 2012." *TREC 2012*. Gaithersburg, Maryland.
- 3. Miles Efron, Adam Kehoe, Peter Organisciak, Sunah Suh. 2011. "The University of Illinois' Graduate School of Library and Information Science at TREC 2011." *TREC 2011*. Gaithersburg, Maryland.
- 4. IMLS Team. 2011. "CLIR-DLF/IMLS DCC Beta Sprint." DPLA Plenary. Washington, DC.

GRANT WRITING

"Exploring the Billions and Billions of Words in the HathiTrust Corpus with Bookworm: HathiTrust + Bookworm". \$324,841. NEH implementation grant. Pls: J.Stephen Downie and Erez Lieberman Aiden. Sept 2014-Aug 2017. Press Release. Contribution: Significant role in proposal development and writing.

TEACHING

Courses

- 1. "Text Mining." Spring 2017. School of Information Sciences, University of Illinois. Designer and instructor of course.
- 2. "Digital Libraries." Fall 2013, Spring 2014, Fall 2014. School of Information Sciences, University of Illinois. TA to Stephen Downie.
- 3. "Crowdsourcing." Jan-July 2008. Metroland West Group. Private sector (publishing).
- 4. "Web Development." Dec 2007-June 2008. Metroland West Group.
- 5. "Introduction to Computing in the Humanities." Sept-Dec 2007. Department of Communication Studies and Multimedia, McMaster University. TA to Stéfan Sinclair. Led tutorials on introductory web design, usability and online media.
- 6. "Mashups." Nov-Dec 2007. Metroland West Group.

Tutorial Workshops

- 1. "Hathi Trust Research Data Workshop." Fall 2016. Exploring DH series. University of Colorado, Boulder, CO.
- 2. "Text Analysis Tools for the HathiTrust." Summer 2016. Taught with Eleanor Dickson. Digital Humanities at Berkeley Summer Institute (DHBSI). Berkeley, California.
- 3. "Mining Texts with the Extracted Features Dataset." Summer 2016. Digital Humanities 2016, Krakow, Poland.

Invited Talks

- 1. "Non-Consumptive Text and Data Mining with The HathiTrust Research Center." March 2016. *Text and Data Mining: Developing Policies and Practices in a Changing Discovery Landscape*, National Federation of Advanced Information Services (NFAIS).
- 2. "Designing for Better Crowdsourcing: Improving the Quality of Crowd-based Data Collection." Oct 2015. University of Texas at Austin, Austin, TX.
- 3. "Optimizing online crowds: Understanding bias in objective and subjective crowdsourcing." Feb 2015. Host: Adam Kalai, Microsoft Research New England, Cambridge, MA.
- 4. "Crowdsourcing in the Academy." Aug 2014. University of Minnesota, Minneapolis, MN. Series: DASH Summer Camp.
- 5. "Incentivizing Online Crowds." Oct 2013. Host: Jana Diesner, University of Illinois, Champaign, IL.
- 6. "When to ask for help: Optimizing projects for crowdsourcing." Apr 2013. Host: Susan Dumais, Microsoft Research, Redmond, WA. Series: MSR Talk Series.

Guest Talks

- 1. "Digital Humanities". Digital Libraries, Prof. Krystyna Matusiak. 10/2017.
- 2. "Usability and Design." *Digital Libraries*, Prof: J. Stephen Downie. Taught multiple times between 2011 and 2017.
- 3. "Introduction to Crowdsourcing." Information Organization and Access, Prof. Miles Efron. Taught: 12/2012.
- 4. "Accessible Data Visualization." Museum Informatics, Prof: Mike Twidale. Taught: 11/2011, 04/2012.
- 5. "Basics of Javascript Programming." Web Technologies and Techniques, Instructor: Ingbert Floyd. Taught: 11/2011.
- 6. "Digital Humanities." Design of Usable Information Interfaces, Instructor: Jeff Ginger. Taught: 09/2011.

PROFESSIONAL ACTIVITIES

Reviewing

IJCDL (International Journal on Digital Libraries), CHI (ACM Conference on Human Factors in Computing Systems), Transactions of the International Society for Information Retrieval (TISMIR), HCOMP (AAAI Conference on Human Computation and Crowdsourcing), Transactions on Intelligent Systems and Technology, JOHD (Journal of Open Humanities Data), DHQ (Digital Humanities Quarterly), DH (Digital Humanities), ICWSM (AAAI Conference on Weblogs and Social Media), ASIS&T (Association of Information Science and Technology Annual Meeting), iConference (The iSchools Conference), JASIS&T.

Service

Publicity Chair, HCOMP 2016 (AAAI Conference on Human Computation and Crowdsourcing). 2016. Program Committee, HCOMP 2016 (AAAI Conference on Human Computation and Crowdsourcing). 2016. Editorial Board, Journal of Open Humanities. 2014-present.

Memberships

Association for the Advancement of Artificial Intelligence (AAAI, 2013-), Association for Computing Machinery (ACM, 2011-), American Society for Information Science and Technology (ASIS&T, 2011-), Alliance of Digital Humanities Organizations (ADHO, 2010-), Canadian Society for Digital Humanities (CSDH-CSHN, 2009-), Canadian Association for Information Science (CAIS, 2009-11)

OTHER EXPERIENCE

Select Work Experience

Developer. 2007-09. Freelance development and design work in academia and publishing. Assistant Photographer. 2007-09. Chappell Studios Convocation ceremony photography.

Graphic Designer. 2004-06. Hayden Industries - Brantford, ON. Graphic Designer. 2004. Crawford and Associates - Brantford, ON.

Select Volunteer Experience

Collaborator. 2010-2011. Mozilla Labs. Part of Mozilla Labs "Crowdsourcing Crowds" team. Layout Editor. 2005-2008. Between the Lines - Hamilton, ON. College arts paper. Strong experience with InDesign.

President. 2006-2008. McMaster Multimedia Students Society - Hamilton, ON. Faculty Representative. 2005, 2006. McMaster Humanities Society - Hamilton, ON.

AWARDS, OTHER

Queen Elizabeth II Graduate Scholarship, 2009; Dean's Honour List, 2006-08; BoM Multimedia Scholarship (for highest mark in program), 2007; Honour J, for Excellence in academic and extra-curricular activities at Saint John's College, 2004; 1st Place (city), University of Waterloo Cayley Mathematics Competition, 2002; 1st Place (city), University of Waterloo Pascal Mathematics Competition, 2001.

SKILLS

Technical

Information Retrieval: Experience with Lucene, Terrier, Indri-Lemur Programming Languages: Proficient with JavaScript, Python, R, Java. Past experience with PHP, C++, ASP Ruby, and Matlab. Notable Tool experience: Scipy stack, Dask (Python); data.table/ggplot (R); D3.js/Backbone.js/R.js/JQuery (JS), Rails (Ruby).

OTHER MEDIA

Tools

<u>Progress Bar Timer</u>. Chrome extension (15000 installs, Oct 14)

REFERENCES

Michael B. Twidale (Professor, Graduate School of Information Sciences, University of Illinois). Computer-supported cooperative work; collaborative technologies; information visualization; ubiquitous learning.

J. Stephen Downie (Professor and Associate Dean for Research, School of Information Sciences, University of Illinois). Music information retrieval; Design and evaluation of IR systems.

Benjamin M. Schmidt (Assistant Professor, History, Northeastern University). Digital history; information visualization; digital humanities; data analysis.

Adam Tauman Kalai (Senior Researcher, Microsoft Research New England). Machine learning; crowdsourcing. Jaime Teevan (Senior Researcher, Microsoft Research; Affiliate Professor, University of Washington). Human computer interaction; information retrieval; social media.

Geoffrey Rockwell (Professor, University of Alberta; Director, Kule Institute for Advanced Study). Textual visualization and analysis, humanities computing, instructional technology, computer games.