

# KURT LUTHER

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## EDUCATION

- 2012–14 Carnegie Mellon University, Pittsburgh, Pa.  
Postdoctoral Fellow, Human–Computer Interaction Institute  
Co-advisors: Steven Dow and Aniket Kittur
- 2006–12 Georgia Institute of Technology (Georgia Tech), Atlanta, Ga.  
Ph.D. in Human-Centered Computing, focus in Social Computing  
Dissertation: *Supporting and Transforming Leadership in Online Creative Collaboration*  
Committee: Amy Bruckman (advisor), Ellen Yi-Luen Do, Eric Gilbert, Scott Counts (Microsoft Research), and Wendy Kellogg (IBM Research)
- 2002–06 Purdue University, West Lafayette, Ind.  
B.S. in Computer Graphics Technology, minor in Art & Design  
Graduated with highest distinction and departmental honors

## EMPLOYMENT

- 2014–Present Virginia Polytechnic Institute and State University (Virginia Tech), Blacksburg, Va.  
Assistant Professor, Department of Computer Science
- 2016–Present Faculty Affiliate, Department of History
- 2014–Present *Military Images Magazine*, Arlington, Va.  
Contributing Editor
- Summer 2010 YouTube (Google), San Bruno, Calif.  
User Experience Research Intern
- Summer 2009 Newgrounds.com, Glenside, Pa.  
Web Development Intern
- Summer 2008 Microsoft Research, Redmond, Wash.  
Research Intern, Social Computing Group and VIBE Group
- Summer 2007 IBM T.J. Watson Research Center, Hawthorne, N.Y.  
Research Intern, Social Computing Group

## AWARDS & HONORS

- 2018 Outstanding New Assistant Professor Award, Virginia Tech College of Engineering
- 2018 Grand Prize (\$25,000 award), Microsoft Cloud AI Research Challenge
- 2018 Best Poster/Demo Award, AAAI HCOMP 2018
- 2018 Recognition of Service Award (for contributions as CI 2018 Program Co-Chair), ACM
- 2018 Junior Faculty Award, Virginia Tech Institute for Critical Technology and Applied Science
- 2017 Faculty Early Career Development (CAREER) Award, National Science Foundation
- 2017 Notable Paper Award, AAAI HCOMP 2017
- 2016 Distinguished Writing Awards Finalist, Army Historical Foundation
- 2016 XCaliber Award Finalist (for technology-enriched teaching), Virginia Tech TLOS
- 2015 Research Impact in Human–Computer Interaction Award, Virginia Tech Center for HCI
- 2013 Best Paper Award (top 1% of submissions), ACM CSCW 2013
- 2012 Best Paper Honorable Mention Award (top 5% of submissions), ACM CSCW 2012
- 2012 Consortium for the Science of Socio-Technical Systems (NSF-funded research institute)
- 2011 James D. Foley Scholar (\$5,000 award for “overall brilliance and potential impact”), GVU Center

- at Georgia Tech
- 2009 Golden Mouse Award (for most entertaining video), ACM CHI 2009
- 2006 Barwise Fellowship for Doctoral Studies in Informatics, Indiana University (declined)
- 2006 Perfect 4.0 GPA Recognition Award, Purdue University
- 2002–06 Academic Success Award (\$11,100 merit scholarship), Purdue University

**EXTERNAL GRANTS**

- 2017–22 Transforming Investigative Science and Practice with Expert-led Crowdsourcing  
\$554,628, National Science Foundation IIS-1651969 (CAREER)  
+ \$8,000 REU supplement (2018)  
PI
- 2016–19 GraphCrowd: Using Crowdsourced Design to Visualize Effects of Environmental Chemicals on Signaling Networks  
\$626,159, National Institutes of Health 1UH2CA203768-01 (Big Data to Knowledge)  
PI (with PI T.M. Murali)
- 2015–19 Supporting Crowdsourced Sensemaking in Big Data with Dynamic Context Slices  
\$500,000, National Science Foundation IIS-1527453 (Cyber-Human Systems)  
+ \$16,000 REU supplement (2018)  
PI (with Co-PI Chris North)
- 2017–18 The American Soldier Collaborative Digital Archive  
\$50,000, National Endowment for the Humanities PW-253766-17 (HCRR)  
Co-PI (with PI Ed Gitre and Co-PI Amanda French)
- 2017 Graduate Student Symposium at the 2017 ACM Conference on Creativity & Cognition  
\$25,252, National Science Foundation IIS-1723306 (Cyber-Human Systems)  
PI
- 2015–17 Mapping the Fourth of July in the American Civil War Era: A Crowdsourced Digital Archive  
\$74,224, National Historical Publications and Records Commission DH50013-15  
Co-PI (with PI Paul Quigley and Co-PI David Hicks)
- 2014 Crowd-Augmented Search and Sensemaking  
\$75,660, Google Faculty Research Award (17% acceptance rate)  
Co-PI (with PI Niki Kittur and Co-PI Steven Dow)

**INTERNAL GRANTS**

- 2018–20 Augmenting Computer Vision with Crowdsourcing to Identify People in Historical and Modern Photographs  
\$80,000, Virginia Tech ICTAS Junior Faculty Award (17% acceptance rate)  
PI (with Co-PI Paul Quigley)
- 2016 VTArtWorks  
\$25,000, Virginia Tech ICAT SEAD Major Initiative  
Co-PI (with PI Bob Leonard and Co-PI Andi Ogier)
- 2016 Designing Software and Community Participation for Crowdsourced History Research  
\$2,880, Virginia Tech ICAT SEAD Mini-grant  
PI (with Co-PIs David Hicks and Paul Quigley)
- 2015 Supporting Community Information Sharing with Mobile Crowdsourcing and Large Display Technologies  
\$15,000, Virginia Tech CHCI Seed Grant  
Co-PI (with Co-PIs Mike Horning, Andrea Kavanaugh, Manuel Perez, and John Tedesco)

- 2015 Evaluating Instructions and Procedures: Crowdsourced Critique of How-to Documentation  
\$3,000, Virginia Tech ICAT SEAD Mini-grant  
Co-PI (with PI Carlos Evia)
- 2014 Supporting Crowdsourced Sensemaking in Big Data with Context Slices  
\$10,000, Virginia Tech ICTAS Seed Grant  
PI (with Co-PI Chris North)
- 2014 Supporting Leadership Development and Reflection through Creative Social Computing  
\$3,000, Virginia Tech ICAT SEAD Mini-grant  
PI (with Co-PIs Nicholas Clegorne and Holly Larson Lesko)

## PUBLICATIONS

Note: In CS and HCI, conferences as well as journals can be top-tier publication venues.

- Journal Articles N.-C. Wang, D. Hicks, and K. Luther. Exploring Trade-Offs Between Learning and Productivity in Crowdsourced History. *Proceedings of the ACM on Human-Computer Interaction*, 2 (CSCW), in press. (26% acceptance rate)
- T. Li, K. Luther, and C. North. CrowdIA: Solving Mysteries with Crowdsourced Sensemaking. *Proceedings of the ACM on Human-Computer Interaction*, 2 (CSCW), in press. (26% acceptance rate)
- M. Sun, J. Zhao, H. Wu, K. Luther, C. North, and N. Ramakrishnan. The Effect of Edge Bundling and Seriation on Sensemaking of Biclusters in Bipartite Graphs. *IEEE Transactions on Visualization and Computer Graphics*, in press. (3.078 impact factor)
- A. Bharadwaj, D.P. Singh, A. Ritz, A.N. Tegge, C.L. Poirel, P. Kraikivski, N. Adames, K. Luther, S. D. Kale, J. Peccoud, J.J. Tyson, and T.M. Murali. GraphSpace: Stimulating Interdisciplinary Collaborations in Network Biology. *Bioinformatics*, 33 (19), 2017. (7.307 impact factor)
- Peer-Reviewed Conference Proceedings D.P. Singh, L. Lisle, T.M. Murali, and K. Luther. CrowdLayout: Crowdsourced Design and Evaluation of Biological Network Visualizations. *Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI 2018)*, Montréal, Canada, 2018. (26% acceptance rate)
- R. Kohler, J. Purviance, and K. Luther. Geolocating Images with Crowdsourcing and Diagramming. *Proceedings of the International Joint Conference on Artificial Intelligence (IJCAI 2018)*, Stockholm, Sweden, 2018. (Invited submission)
- R. Kohler, J. Purviance, and K. Luther. Supporting Image Geolocation with Diagramming and Crowdsourcing. *Proceedings of the AAAI Conference on Human Computation and Crowdsourcing (HCOMP 2017)*, Québec City, Canada, 2017. (**Notable Paper Award**) (29% acceptance rate)
- A. Yuan, K. Luther, M. Krause, S. Vennix, S. Dow, and B. Hartmann. Almost an Expert: The Effects of Rubrics and Expertise on Perceived Value of Crowdsourced Design Critiques. *Proceedings of the ACM Conference on Computer Supported Cooperative Work and Social Computing (CSCW 2016)*, San Francisco, Calif., USA, 2016. (25% acceptance rate)
- K. Luther, N. Hahn, S. Dow, and A. Kittur. Crowdlines: Supporting Synthesis of Diverse Information Sources through Crowdsourced Outlines. *Proceedings of the AAAI Conference on Human Computation and Crowdsourcing (HCOMP 2015)*, San Diego, Calif., USA, 2015. (30% acceptance rate)
- K. Luther, J. Tolentino, W. Wu, A. Pavel, B. Bailey, M. Agrawala, B. Hartmann, and S. Dow. Structuring, Aggregating, and Evaluating Crowdsourced Design Critique. *Proceedings of the ACM Conference on Computer Supported Cooperative Work and Social Computing (CSCW 2015)*, Vancouver, Canada, 2015. (28% acceptance rate)

J. Cranshaw, K. Luther, P.G. Kelley, and N. Sadeh. Curated City: Capturing Individual Mental Maps Through Social City Guides. *Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI 2014)*, Paris, France, 2014. (23% acceptance rate)

K. Luther, C. Fiesler, and A. Bruckman. Redistributing Leadership in Online Creative Collaboration. *Proceedings of the ACM Conference on Computer Supported Cooperative Work (CSCW 2013)*, San Antonio, Tx., USA, 2013. (**Best Paper Award**) (36% acceptance rate)

P. André, M. Bernstein, and K. Luther. Who Gives a Tweet: Evaluating Microblog Content Value. *Proceedings of the ACM Conference on Computer Supported Cooperative Work (CSCW 2012)*, Bellevue, Wash., USA, 2012. (**Best Paper Honorable Mention Award**) (9% acceptance rate for top-tier submissions)

K. Luther, K. Caine, K. Ziegler, and A. Bruckman. Why It Works (When It Works): Success Factors in Online Creative Collaboration. *Proceedings of the ACM Conference on Supporting Group Work (GROUP 2010)*, Sanibel Island, Fla., USA, 2010. (36% acceptance rate)

K. Luther, S. Counts, K.B. Stecher, A. Hoff, and P. Johns. Pathfinder: An Online Collaboration Environment for Citizen Scientists. *Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI 2009)*, Boston, Mass., USA, 2009. (25% acceptance rate)

B. Magerko, W. Manzoul, M. Riedl, A. Baumer, D. Fuller, K. Luther, and C. Pearce. An Empirical Study of Cognition and Theatrical Improvisation. *Proceedings of the ACM Conference on Creativity and Cognition (C&C 2009)*, Berkeley, Calif., USA, 2009. (25% acceptance rate)

K. Luther and A. Bruckman. Leadership in Online Creative Collaboration. *Proceedings of the ACM Conference on Computer Supported Cooperative Work (CSCW 2008)*, San Diego, Calif., USA, 2008. (23% acceptance rate)

J.B. Ellis, K. Luther, K. Bessiere, and W.A. Kellogg. Games for Virtual Team Building. *Proceedings of the ACM Conference on Designing Interactive Systems (DIS 2008)*, Cape Town, South Africa, 2008. (34% acceptance rate)

N. Diakopoulos, K. Luther, and I. Essa. Audio Puzzle: Piecing Together Time-Stamped Speech Transcripts with a Puzzle Game. *Proceedings of the ACM Conference on Multimedia (MM 2008)*, Vancouver, Canada, 2008. (18% acceptance rate)

Y. Kang, J. Stasko, K. Luther, A. Ravi, and Y. Xu. RevisiTour: Enriching the Tourism Experience with User-Generated Content. *Proceedings of the Conference on Information and Communication Technologies in Tourism (ENTER 2008)*, Innsbruck, Austria, 2008.

N. Diakopoulos, K. Luther, Y.“E.” Medynskiy, and I. Essa. The Evolution of Authorship in a Remix Society. *Proceedings of the ACM Conference on Hypertext and Hypermedia (HT 2007)*, Manchester, UK, 2007. (34% acceptance rate)

Peer-Reviewed  
Extended  
Abstracts,

V. Mohanty, D. Thames, and K. Luther. Photo Sleuth: Combining Collective Intelligence and Computer Vision to Identify Historical Portraits. *ACM Conference on Collective Intelligence (CI 2018)*, Zurich, Switzerland, 2018. (32% acceptance rate for oral presentations)

Posters, Demos,  
and Videos

V. Mohanty, D. Thames, and K. Luther. Are 1,000 Features Worth A Picture? Combining Crowdsourcing and Face Recognition to Identify Civil War Soldiers. *AAAI Conference on Human Computation and Crowdsourcing (HCOMP 2018)*, Zurich, Switzerland, 2018. (**Best Poster/Demo Award**)

S. Venkatagiri, J. Thebault-Spieker, and K. Luther. Verifying Truth from the Ground: Leveraging Human Strengths in the Image Geolocation Process. *Human-Computer Interaction Consortium (HCIC) Conference*, Watsonville, Calif., USA, 2018.

J.M. Derwin, V.A. Thomas, R.H. Wynne, S.S. Peery, J. Coulston, K. Luther, G. Liknes, and S. Bender. Validating the 2011 and 2016 NLCD Tree Canopy Cover Products using Crowdsourced

- Interpretations. *American Geophysical Union (AGU) Fall Meeting 2018*, Washington, D.C., USA, 2018.
- R. Kohler and K. Luther. Crowdsourced Image Geolocation as Collective Intelligence. *Collective Intelligence 2017*, New York, N.Y., USA, 2017.
- T.M. Murali, D.P. Singh, and K. Luther. Using Crowds to Design Biological Network Visualizations. *NIH Big Data to Knowledge (BD2K) All Hands Meeting*, Bethesda, Md., USA, 2016.
- K. Luther, A. Pavel, W. Wu, J. Tolentino, M. Agrawala, B. Hartmann, and S. Dow. CrowdCrit: Crowdsourcing and Aggregating Visual Design Critique. *ACM Conference on Computer Supported Cooperative Work (CSCW 2014)*, Baltimore, Md., USA, 2014.
- K. Luther, N. Diakopoulos and A. Bruckman. Edits & Credits: Exploring Integration and Attribution in Online Creative Collaboration. *ACM Conference on Human Factors in Computing Systems (alt.chi 2010)*, Atlanta, Ga., USA, 2010. (Invited submission)
- M. Bernstein, P. André, K. Luther, E.T. Solovey, E.S. Poole, S.A. Paul, S.K. Kane, and J. Grudin. CHIstory. *ACM Conference on Human Factors in Computing Systems (CHI 2009)*, Boston, Mass., USA, 2009. (**Most Entertaining Video Award**)
- K. Luther and A. Bruckman. Flash Collabs: Collaborative Innovation Networks in Online Communities of Animators. *Conference on Collaborative Innovation Networks (COINS 2009)*, Savannah, Ga., USA, 2009.
- K. Luther, K. Ziegler, K.E. Caine, and A. Bruckman. Predicting Successful Completion of Online Collaborative Animation Projects. *ACM Conference on Creativity and Cognition (C&C 2009)*, Berkeley, Calif., USA, 2009.
- K. Luther, M. Flaschen, A. Forte, C. Jordan, and A. Bruckman. Provelt: A New Tool for Supporting Citation in MediaWiki. *International Symposium on Wikis and Open Collaboration (WikiSym 2009)*, Orlando, Fla., USA, 2009.
- Book Chapter A. Bruckman, K. Luther, and C. Fiesler. When Should We Use Real Names in Published Accounts of Internet Research? In *Digital Research Confidential: The Secrets of Studying Behavior Online*, Hargittai, E. and Sandvig, C., eds., Cambridge, Mass.: MIT Press, 2015.
- Magazine Articles K. Luther. Human Computation for Image and Video Analysis (GroupSight). *AI Magazine*, to appear. (Invited submission)
- K. Luther and A. Bruckman. Leadership and Success Factors in Online Creative Collaboration. *IEEE Potentials*, 30 (5), September/October 2011. (Invited submission)
- Workshop Papers S. Venkatagiri, J. Thebault-Spieker, A. Camacho, and K. Luther. Localness and Urbanness in Geographic Crowd Work. *CSCW 2018 Workshop on Rural Computing: Beyond Access & Infrastructure*, Jersey City, NJ, USA, 2018.
- T. Li, A. Shah, K. Luther, and C. North. Crowdsourcing Intelligence Analysis with Context Slices. *CHI 2018 Workshop on Sensemaking in a Senseless World*, Montréal, Canada, 2018. (21% acceptance rate for full presentations)
- R. Kohler, J. Purviance, and K. Luther. GroundTruth: Bringing Together Experts and Crowds for Image Geolocation. *HCOMP 2017 GroupSight Workshop on Human Computation for Image and Video Analysis*, Québec City, Canada, 2017.
- S. Mehta, C. North, and K. Luther. An Exploratory Study of Human Performance in Image Geolocation Tasks. *HCOMP 2016 GroupSight Workshop on Human Computation for Image and Video Analysis*, Austin, Tx., USA, 2016.

K. Luther, A. Kavanaugh, and M. Horning. Supporting Local News Sharing with Mobile Crowdsourcing and Large Display Technologies. *CSCW 2015 Workshop on Information Technology in City Life*, Vancouver, Canada, 2015.

K. Luther, S. Dow, and A. Kittur. How Can Crowdsourcing Help Individuals Learn? *CSCW 2014 Workshop on Designing Futures for Peer-to-Peer Learning*, Baltimore, Md., USA, 2014.

K. Luther. Fast, Accurate, and Brilliant: Realizing the Potential of Crowdsourcing and Human Computation. *CHI 2011 Workshop on Crowdsourcing and Human Computation*, Vancouver, Canada, 2011.

P. André, m.c. schraefel, A. Dix, R.W. White, M. Bernstein, and K. Luther. Designing for Schadenfreude (or, how to express well-being and see if you're boring people). *CHI 2010 Workshop on Microblogging: What and How Can We Learn From It?*, Atlanta, Ga., USA, 2010.

S. Yardi, K. Luther, N. Diakopoulos, and A. Bruckman. Opening the Black Box: Four Views of Transparency in Remix Culture. *CSCW 2008 Workshop on Tinkering, Tailoring, & Mashing: The Social and Collaborative Practices of the Read-Write Web*, San Diego, Calif., USA, 2008.

J.B. Ellis, K. Luther, K. Bessiere, and W.A. Kellogg. Games for Virtual Team Building. *CSCW 2008 Workshop on Supporting Distributed Team Work*, San Diego, Calif., USA, 2008.

K. Luther and N. Diakopoulos. Distributed Creativity. *C&C 2007 Workshop on Supporting Creative Acts Beyond Dissemination*, Washington, D.C., USA, 2007.

Technical Reports A. Yuan, K. Luther, M. Krause, S. Dow, and B. Hartmann. Worker Expertise and Expert Rubrics in Crowdsourced Design Critique. UCB/EECS-2015-223, University of California, Berkeley, 2015.

W. Wu, K. Luther, A. Pavel, B. Hartmann, S. Dow, and M. Agrawala. CrowdCritic: Strategies for Crowdsourcing Visual Design Critique. UCB/EECS-2013-95, University of California, Berkeley, 2013.

N. Diakopoulos, K. Luther, Y.“E.” Medynskiy, and I. Essa. Remixing Authorship: Reconfiguring the Author in Online Video Remix Culture. GIT-IC-07-05, Georgia Institute of Technology, 2007.

#### **OTHER RESEARCH ACTIVITIES**

Workshops & Panels N.-C. Wang, D. Cline, D. Hicks, K. Luther, K. McPherson, C. Perrier, and P. Quigley. The Design, Development and Implementation of Funded Transdisciplinary Digital History Projects: Illustrative Cases of K-16 Collaboration in Action. *132<sup>nd</sup> Annual Meeting of the American Historical Association (AHA 2018)*, Washington, D.C., USA, 2018.

D. Gurari, K. Luther, G. Patterson, and S. Branson. GroupSight: The 2<sup>nd</sup> Workshop on Human Computation for Image and Video Analysis. *AAAI Conference on Human Computation and Crowdsourcing (HCOMP 2017)*, Québec City, Canada, 2017.

P. Quigley, K. Luther, D. Hicks, D. Newcomb, and N.-C. Wang. New Directions for Inquiry: Citizen Student Archivists Crowdsourcing the Past. *96<sup>th</sup> Annual Conference of the National Council for the Social Studies (NCSS 2016)*, Washington, D.C., USA, 2016.

D. Hicks, K. Luther, and P. Quigley. Crowdsourcing the History of American Independence Day in Civil War-Era Virginia. *2016 Virginia Forum*, Williamsburg, Va., USA, 2016.

E. Cook, K. Luther, D. Perkel, and J. Bardzell. The Creativity Agenda in the iSchool Context. *iConference 2011*, Seattle, Wash., USA, 2011.

J. Thom-Santelli, E. Cook, K. Luther, A. Bruckman, J. Bardzell, and D. McDonald. Approaching “Amateur.” *ACM Conference on Supporting Group Work (GROUP 2010)*, Sanibel Island, Fla., USA, 2010.

D. Perkel, L. Grant, B. Herr-Stephenson, and K. Luther. Rules of Engagement in Participatory Cultures: Negotiating Feedback, Audiences and Critique in Online Communities. *Conference on Digital Media and Learning (DML 2010)*, La Jolla, Calif., USA, 2010.

D.A. Shamma, D. Perkel, and K. Luther. Understanding the Creative Conversation: Modeling to Engagement. *ACM Conference on Creativity and Cognition (C&C 2009)*, Berkeley, Calif., USA, 2009.

Doctoral CHI 2010 Doctoral Consortium, Atlanta, Ga., USA, 2010 (26% acceptance rate)  
Consortia GROUP 2009 Doctoral Consortium, Sanibel Island, Fla., USA, 2009

Research Camps THATCamp: The Humanities and Technology Camp  
Virginia Tech, Blacksburg, Va., USA, April 10–11, 2015  
Chatham University, Pittsburgh, Pa., USA, October 5–6, 2013  
George Mason University, Fairfax, Va., USA, June 7–8, 2013

CrowdCamp: Rapidly Iterating Ideas for Collective Intelligence and Crowdsourcing  
HCOMP 2015 Workshop, San Diego, Calif., USA, November 9, 2015  
CSCW 2013 Workshop, San Antonio, Tx., USA, February 23–24, 2013  
CHI 2012 Workshop, Austin, Tx., USA, May 5–6, 2012

CSST: Summer Research Institute for the Science of Socio-Technical Systems  
CSST 2012, Santa Fe, N.M., USA, July 29–August 2, 2012

#### INVITED PRESENTATIONS

February 2019 Dept. of Computer and Information Science, IUPUI, Indianapolis, Ind.  
October 2018 Image of War Seminar, Center for Civil War Photography, Alexandria, Va.  
July 2018 Institute for Digital Arts & Humanities, Indiana University, Bloomington, Ind.  
November 2017 Segal Distinguished Seminar, Northwestern University, Evanston, Ill.  
May 2017 HCI Seminar, Stanford University, Stanford, Calif.  
April 2017 Crowdsourcing Seminar, Carnegie Mellon University, Pittsburgh, Pa.  
November 2016 Nau Center for Civil War History, University of Virginia, Charlottesville, Va.  
March 2016 25<sup>th</sup> Annual Civil War Weekend, Virginia Tech, Blacksburg, Va.  
October 2015 HCI Lab, University of Maryland, College Park, Md.  
October 2015 Willson Center Digital Humanities Lab, University of Georgia, Athens, Ga.  
October 2014 Virginia Center for Civil War Studies, Blacksburg, Va.  
March 2014 Dept. of Computer Science, Virginia Tech, Blacksburg, Va.  
February 2014 Engineering Design, Penn State University, State College, Pa.  
February 2014 Dept. of Computer Science, University of Illinois at Urbana–Champaign, Urbana, Ill.  
February 2014 Dept. of Computer Science & Engineering, University of Minnesota, Minneapolis, Minn.  
January 2014 Dept. of Media and Information, Michigan State University, East Lansing, Mich.  
January 2014 Dept. of Computer Science, University of Colorado Boulder, Boulder, Colo.  
November 2013 School of Information, University of Michigan, Ann Arbor, Mich.  
September 2013 Crowdsourcing Seminar, Carnegie Mellon University, Pittsburgh, Pa.  
April 2012 Google Research, Mountain View, Calif.  
April 2012 Dept. of Computer Graphics Technology, Purdue University, West Lafayette, Ind.  
March 2012 GVU Center at Georgia Tech, Atlanta, Ga.  
March 2012 Social Computing Lab, Carnegie Mellon University, Pittsburgh, Pa.  
October 2011 MIT Media Lab, Cambridge, Mass.

#### PROFESSIONAL SERVICE

Conference Papers Co-Chair, ACM Creativity & Cognition 2019  
Committees Program Committee Co-Chair, ACM Collective Intelligence 2018  
Associate Chair (Papers), ACM CSCW 2018 (First Cycle)  
Chair, Virginia Tech Workshop on Designing Socio-Technical Systems of Truth 2018

Program Committee Member and Doctoral Consortium Mentor, AAAI HCOMP 2017  
 Program Committee Member, Collective Intelligence 2017  
 Graduate Student Symposium Co-Chair, ACM Creativity & Cognition 2017  
 Senior Program Committee Member, AAAI ICWSM 2016  
 Program Committee Member, AAAI HCOMP 2016  
 Associate Chair (Papers), ACM CSCW 2016  
 Videos Co-Chair, ACM CHI 2016  
 Associate Chair (Papers), ACM CSCW 2015  
 Associate Chair (Papers), ACM Creativity & Cognition 2015  
 Program Committee Member, AAAI HCOMP 2014 Workshop on Volunteer-Based  
 Crowdsourcing  
 ACM Student Research/Design Competition Juror, ACM CHI 2014  
 ACM Student Research/Design Competition Juror, ACM CHI 2013  
 Associate Chair (Videos), ACM CHI 2013  
 General Submissions & Late Breaking Juror, ACM SIGGRAPH 2013  
 Posters Chair, ACM SIGGRAPH 2013  
 Associate Chair (Videos), ACM CHI 2012  
 Associate Chair (Works-in-Progress), ACM CHI 2012  
 General Submissions & Late Breaking Juror, ACM SIGGRAPH 2012  
 Posters Chair, ACM SIGGRAPH 2012  
 Associate Chair (Videos), ACM CHI 2011  
 Associate Chair (Works-in-Progress), ACM CHI 2011  
 Local Arrangements Co-Chair, ACM Creativity & Cognition 2011  
 Graphic Design Chair & Webmaster, ACM CSCW 2011  
 Program Committee Member, ACM WikiSym 2011  
 Student Volunteers Co-Chair, ACM CHI 2010  
 Graphic Design Chair & Webmaster, ACM CSCW 2010  
 Presentations Coordinator (Computer Animation Festival), ACM SIGGRAPH 2009

Conference CHI: 2008–19  
 Reviewing Creativity & Cognition: 2007, 2009, 2013, 2017  
 CSCW: 2008, 2010–18  
 DIS: 2017  
 SIGGRAPH: 2009, 2012–13  
 Ubicomp: 2012  
 UIST: 2010, 2012–14  
 VAST: 2018

Journal and Magazine  
 Reviewing *American Behavioral Scientist*  
*Communications of the ACM*  
*Games and Culture*  
*Human–Computer Interaction*  
*IEEE Computer*  
*ACM Transactions on Computer–Human Interaction (ToCHI)*  
*Transformative Works and Cultures*

Book Reviewing Cambridge University Press (2017)

Virginia Tech Advisory Board Member, VTArtWorks (2015–Present)  
 Executive Committee, IGEP in Human Centered Design (2016–2018)  
 Member, Dept. of Computer Science Graduate Program Committee (2018)  
 Member, Dept. of Computer Science Faculty Search Committee (2015, 2016, 2017)  
 Member, Space Subcommittee, Creativity & Innovation Strategic Growth Area (2016–17)  
 Co-Director for Social Informatics, Center for Human–Computer Interaction (2015–16)

CMU Coordinator, Social Computing Lab Summer REU Program (2013)



- Georgia Tech Member, School of Interactive Computing Faculty Search Committee (2010)  
 Lab Manager, Electronic Learning Communities Lab (2007–12)  
 Judge, Undergraduate Research Spring Symposium (2010–11)  
 Reviewer, President’s Undergraduate Research Awards (2011)
- Other Activities Technical Advisor, *Wisdom of the Crowd* CBS television series (2017)  
 Review Panelist, National Science Foundation (2016, 2017(x2))  
 Technical Advisor, Center for Virtual History, University of Georgia (2011–2015)  
 Editor-at-Large, *Digital Humanities Now* (2013)

### TEACHING

As Instructor of Record at Virginia Tech:

- Fall 2018 CS3744: Introduction to GUI Programming and Graphics (undergraduate)  
 CS5774: User Interface Software (graduate)
- Spring 2018 CS3744: Introduction to GUI Programming and Graphics (undergraduate, 102 students)
- Fall 2017 CS6724: Advanced Topics in Human-Computer Interaction (graduate, 8 students)
- Fall 2016 CS3744: Introduction to GUI Programming and Graphics (undergraduate, 57 students)  
 CS5774: User Interface Software (graduate, 23 students)
- Spring 2016 CS3744: Introduction to GUI Programming and Graphics (undergraduate, 82 students)
- Fall 2015 CS6724: Advanced Topics in Human-Computer Interaction (graduate, 9 students)
- Spring 2015 CS4784: Human-Computer Interaction Capstone (undergraduate, 22 students)
- Fall 2014 CS5774: User Interface Software (graduate, 20 students)
- As Graduate Teaching Assistant at Georgia Tech:
- Spring 2009 CS6470: Design of Online Communities (graduate, 22 students) (Instructor: Amy Bruckman)

### ADVISING

- Postdoc Advisee Jacob Thebault-Spieker, Ph.D. Computer Science, University of Minnesota (2018–Present)
- Graduate Thesis Advisees Sukrit Venkatagiri, Ph.D. Computer Science  
 Vikram Mohanty, Ph.D. Computer Science  
 Aditya Bharadwaj, Ph.D. Computer Science (Co-advised with T.M. Murali)  
 Tianyi Li, Ph.D. Computer Science (Co-advised with Chris North)  
 Nai-Ching Wang, Ph.D. Computer Science  
 Navid Falla, Ph.D. Human-Centered Design (On leave)  
 Rachel Kohler, M.S. Computer Science (Graduated 2017)  
**(William Preston Society Master’s Thesis Award [STEM category])**  
 Divit Singh, M.S. Computer Science (Co-advised with T.M. Murali) (Graduated 2016)
- Graduate Thesis Committees Yali Bian, Ph.D. Computer Science  
 Rama Vedantam, Ph.D. Computer Engineering  
 Jill Derwin, Ph.D. Forestry and Remote Sensing  
 Moeti Masiane, Ph.D. Computer Science  
 Ji Wang, Ph.D. Computer Science  
 Leanna Ireland, Ph.D. Sociology  
 Daniel Garrison, Ph.D. Computer Science  
 Sarang Joshi, M.S. Computer Science  
 Setor Zilevu, M.S. Computer Science  
 Michael Stewart, Ph.D. Computer Science (Graduated 2018)  
 Andrey Esakia, Ph.D. Computer Science (Graduated 2018)

Katelyn Brown, M.A. History (Graduated 2018)  
 Anamary Leal, Ph.D. Computer Science (Graduated 2017)  
 Hannah Roth, M.S. Computer Science (Graduated 2017)  
 Daniel Newcomb, M.A. History (Graduated 2017)  
**(Outstanding CLAHS Master's Student Award)**  
 Chris Frisina, M.S. Computer Science (Graduated 2016)  
 Maoyuan Sun, Ph.D. Computer Science (Graduated 2016)  
 Sanchit Chadra, M.S. Computer Science (Graduated 2015)  
**(Outstanding CS Master's Student Award)**  
 Nathan Self, M.S. Computer Science (Graduated 2015)  
 Jessica Zeitz Self, Ph.D. Computer Science (Graduated 2015)

Undergraduate Research Advisees

- Aliza Camacho, B.A. Computer Science & B.A. Anthropology, Wellesley College (2018)
- Ryan Russell, B.S. Computer and Information Science, Virginia Military Institute (2018)
- Natalie Robinson, B.A. History & B.A. Public Relations, University of Georgia (2018)
- Anne Hoang, B.S. Computer Science, Virginia Tech (2018)
- David Thames, B.S. Computer Science, Virginia Tech (2017–2018)
- Asmita Shah, B.S. Computer Science, Virginia Tech (2017–2018)
- Shahmir Ahmed, B.S. Computer Science, Virginia Tech (2017)
- Liyang Li, B.S. Computer Science, Virginia Tech (2017)
- Caroline Ritchey, B.A. National Security & B.A. History, Virginia Tech (2017)
- Parker Irving, B.S. Computer Science, Virginia Tech (2017)
- Allison Collier, B.S. Computer Science, Virginia Tech (2017)
- Nam Nguyen, B.S. Computer Science, Virginia Tech (2017)
- David Gwizdala, B.S. Computer Engineering, Virginia Tech (2016–17)
- Wenfeng Ren, B.S. Computer Science, Virginia Tech (2016)
- Melanie Trammell, B.S. Computer Science, Virginia Tech (2016)
- Zhizheng (Andy) Chen, B.S. Computer Science, Virginia Tech (2015)
- Amit Dayal, B.S. Computer Science, Virginia Tech (2015)
- Jared Deiner, B.S. Computer Science, Virginia Tech (2015)
- Vijay Kuruvilla, B.S. Computer Science, Virginia Tech (2015)
- Edward McEnrue, B.S. Computer Science, Virginia Tech (2015)
- Avanti Dabholkar, B.S. Human–Computer Interaction & B.Arch. Architecture, CMU (2013–14)
- Bhawna Agarwal, B.Design, Indian Institute of Technology Guwahati (2014)
- Jari-lee (Jay) Tolentino, B.S. Informatics & B.A. Studio Art, UC Irvine (2013)

**SELECTED PRESS**

May 2018 Stars and Stripes: WWII in a new light: Anonymous soldier surveys tell stories of morale, race relations  
<https://www.stripes.com/news/wwii-in-a-new-light-anonymous-soldier-surveys-tell-stories-of-morale-race-relations-1.525772>

August 2017 WVTF (NPR affiliate): Crowd Sleuthing: Harnessing the Power of Crowds  
<http://wvtf.org/post/crowd-sleuthing-harnessing-power-crowds>

June 2017 WVTF (NPR affiliate): Celebrating July 4<sup>th</sup> When the Country Was Falling Apart  
<http://wvtf.org/post/celebrating-july-4th-when-country-was-falling-apart>

July 2016 IEEE Spectrum: How to Run a Successful Mobile Crowdsourcing Project  
<http://spectrum.ieee.org/at-work/innovation/how-to-run-a-successful-mobile-crowdsourcing-project>

January 2016 Science: The Power of Crowds  
<http://science.sciencemag.org/content/351/6268/32>

- December 2012 Nieman Journalism Lab: The Year in Social Media Research  
<http://www.niemanlab.org/2012/12/questioning-the-network-the-year-in-social-media-research/>
- May 2012 Harvard Business Review: What Makes a Great Tweet  
<http://hbr.org/2012/05/what-makes-a-great-tweet/ar/1>
- February 2012 TIME: Cool It With the Hashtags: How to Not Be Extremely Annoying on Twitter  
<http://newsfeed.time.com/2012/02/04/cool-it-with-the-hashtags-how-to-not-be-extremely-annoying-on-twitter/>
- January 2012 The Atlantic: Be Better at Twitter: The Definitive, Data-Driven Guide  
<https://www.theatlantic.com/technology/archive/2012/01/be-better-at-twitter-the-definitive-data-driven-guide/252273/>
- January 2011 CNN: 4 Online Services to Satisfy Your Vanity  
[http://www.cnn.com/2011/TECH/social.media/01/12/vanity.netiquette/index.html?eref=ib\\_technology](http://www.cnn.com/2011/TECH/social.media/01/12/vanity.netiquette/index.html?eref=ib_technology)
- December 2010 Mashable: Are Your Tweets Boring or Beneficial?  
<http://mashable.com/2010/12/30/who-gives-a-tweet/>
- September 2008 The Guardian: Transcribe-‘Em-Up  
<https://www.theguardian.com/technology/gamesblog/2008/sep/09/transcribeemup>