# KATE STARBIRD

Curriculum Vitæ

Human Centered Design and Engineering 413 Sieg Hall Box 352315 Seattle, WA 98195 Phone: 206 313 2766 Fax: 206 543 8858 Email: kstarbi@uw.edu

### **EDUCATIONAL HISTORY**

University of Colorado Boulder, Boulder, CO PhD, Technology, Media & Society August 2012

Dissertation: Crowdwork, Crisis and Convergence: How the Connected Crowd Organizes Information during Mass Disruption Events

Stanford University, Stanford, CA BA, Computer Science June 1997

### EMPLOYMENT HISTORY

University of Washington Seattle, WA Assistant Professor, Human Centered Design & Engineering, 2012 – present

#### AWARDS AND HONORS

Junior Faculty Innovator, HCDE

### AFFILIATIONS AND OTHER APPOINTMENTS

Adjunct Professor, Computer Science & Engineering, University of Washington Adjunct Professor, Information School, University of Washington

### **PUBLICATIONS**

### Conference proceedings and other non-journal articles (Fully refereed publications)

1. Starbird, Kate, Jim Maddock<sup>1</sup>, Mania Orand<sup>1</sup>, Peg Achterman, & Robert M. Mason, (2014). Rumors, False Flags, and Digital Vigilantes: Misinformation on Twitter after the 2013 Boston Marathon Bombings. Short paper. *iConference 2014*, Berlin, Germany. Acceptance rate: 49% • Best Note Award

- 2. Cobb, Camille<sup>1</sup>, Ted McCarthy, Annuska Perkins, Ankitha Bharadwaj, Jared Comis, Brian Do, & Kate Starbird (2014). Designing for the Deluge: Understanding & Supporting the Distributed, Collaborative Work of Crisis Volunteers. *Proceedings of the ACM 2013 Computer Supported Cooperative Work (CSCW 2014)*, Baltimore, MD. Acceptance rate: 27% with rigorous journal-like revision process
- 3. Starbird, Kate. (2014). Delivering Patients to Sacré Coeur: Collective Intelligence in Digital Volunteer Communities. *Proceedings of the ACM 2012 Conference on Human Factors in Computing Systems (CHI 2013)*, Paris, France. Acceptance rate: 20%
- Starbird, Kate and Leysia Palen. (2013). Working & Sustaining the Virtual "Disaster Desk."
   *Proceedings of the ACM 2012 Conference on Computer Supported Cooperative Work* (CSCW 2013), San Antonio, TX, pp. 491-502.
   Acceptance rate: 36% with rigorous journal-like revision process Best Paper Award Citations: 9,
   Google Scholar
- 5. Starbird, Kate and Leysia Palen. (2012). (How) Will the Revolution be Retweeted? Information Diffusion and the 2011 Egyptian Uprising. *Proceedings of the ACM 2012 Conference on Computer Supported Cooperative Work (CSCW 2012)*, Seattle, WA, pp. 7-16. Acceptance rate: 39.5% with rigorous journal-like revision process Citations: 64, Google Scholar
- 6. Sarcevic, Aleksandra, Leysia Palen, Joanne White, Kate Starbird, Mossaab Bagdouri, and Kenneth Anderson. (2012). "Beacons of Hope" in Decentralized Coordination: Learning from On-the-Ground Medical Twitterers During the 2010 Haiti Earthquake. *Proceedings of the ACM 2012 Conference on Computer Supported Cooperative Work (CSCW 2012)*, Seattle, WA, pp. 47-56.
  - Acceptance rate: 39.5% with rigorous journal-like revision process Citations: 6, Google Scholar
- 7. Starbird, Kate, Grace Muzny and Leysia Palen. (2012). Learning from the Crowd: Collaborative Filtering Techniques for Identifying On-the-Ground Twitterers during Mass Disruptions. Presented at the 2012 Information Systems for Crisis Response and Management Conference (ISCRAM 2012), Vancouver, Canada. Citations: 13, Google Scholar
- 8. Starbird, Kate and Leysia Palen. (2011). "Voluntweeters": Self-Organizing by Digital Volunteers in Times of Crisis. *Proceedings of the ACM 2011 Conference on Human Factors in Computing Systems (CHI 2011)*, Vancouver, CA, pp. 1071-1080. Acceptance Rate: 26% Honorable Mention Paper Award Citations: 100, Google Scholar
- 9. Starbird, Kate and Leysia Palen. (2011). More Than the Usual Suspects: The Physical Self and Other Resources for Learning to Program Using a 3D Avatar Environment. Presented at the *2011 iConference*, Seattle, WA.
- 10. Starbird, Kate, Leysia Palen, Amanda L Hughes, and Sarah Vieweg. (2010). Chatter on The Red: What Hazards Threat Reveals about the Social Life of Microblogged Information. Proceedings of the ACM 2010 Conference on Computer Supported Cooperative Work (CSCW 2010), Savannah, GA, pp. 241-250. Acceptance rate: 20% • Honorable Mention, Best Paper • Citations: 175, Google Scholar
- 11. Starbird, Kate and Leysia Palen. (2010). Pass It On?: Retweeting in Mass Emergencies. Presented at the 2010 Information Systems for Crisis Response and Management Conference (ISCRAM 2010), Seattle, WA.
  - Nominated for Best Paper Citations: 77, Google Scholar
- 12. Vieweg, Sarah, Amanda L. Hughes, Kate Starbird, and Leysia Palen. (2010). A Comparison of Microblogging Behavior in Two Natural Hazards Events: What Twitter May Contribute to Situational Awareness. *Proceedings of the ACM 2010 Conference on Human Factors in*

Computing Systems (CHI 2010), Atlanta, GA, pp. 1079-1088.

Acceptance rate: 22% • Citations: 311, Google Scholar

### Conference proceedings and other non-journal articles (Lightly Reviewed)

- 1. Torkildson, Megan, Kate Starbird and Cecilia Aragon (Forthcoming). Analysis and Visualization of Sentiment and Emotion on Crisis Tweets. Short Paper. 2014 Conference on Cooperative Design, Visualization & Engineering (CDVE 2014).
- 2. Dailey, Dharma<sup>1</sup> and Kate Starbird. (2014). Visible Skepticism: Community Vetting after Hurricane Irene. Short Paper. 2014 Information Systems for Crisis Response and Management Conference (ISCRAM 2014), Penn State University.
- 3. Starbird, Kate. (2012). What "Crowdsourcing" Obscures: Exposing the Dynamics of Connected Crowd Work During Disaster. *Collective Intelligence 2012*, Cambridge, MA.
- 4. Starbird, Kate and Jeannie Stamberger. (2010). Tweak the Tweet: Leveraging Microblogging Proliferation with a Prescriptive Grammar to Support Citizen Reporting. Presented at the 2010 Information Systems for Crisis Response and Management Conference (ISCRAM 2010), Seattle, WA.

Citations: 62, Google Scholar

#### Workshop papers and posters

- 1. Starbird, Kate. (2013). Supporting the Geolocating Work of Crisis Mappers. Workshop Position Paper for CHI '13 Workshop on Geographic Human-Computer Interaction at the 2013 Conference on Human Factors in Computing Systems (CHI 2013), Paris, France.
- 2. Starbird, Kate. (2012). Digital Volunteerism: Examining Connected Crowd Work During Mass Disruption Events. Workshop Position Paper for CSCW'12 Workshop on Crisis Informatics and Collaboration at the 2012 Conference on Computer Supported Cooperative Work (CSCW 2012), Seattle, WA.
- 3. Starbird, Kate. (2011). Digital Volunteerism During Disaster: Crowdsourcing Information Processing. Workshop Position Paper for CHI '11 Workshop on Crowdsourcing and Human Computation at the 2011 Conference on Human Factors in Computing Systems (CHI 2011), Vancouver, Canada.
- 4. Vieweg, Sarah and Kate Starbird. (2010). Microblogging in Mass Emergency. Workshop Position Paper for CHI '10 Workshop on Microblogging: What and How Can We Learn From It? at the 2010 Conference on Human Factors in Computing Systems (CHI 2010), Atlanta, GA.
- 5. Starbird, Kate. (2008). Web 2.0 as a Constructionist Educator's Playground. Workshop Position Paper for CSCW '08 Workshop on Tinkering, Tailoring, & Mashing: The Social and Collaborative Practices of the Read-Write Web at the 2008 Conference on Computer Supported Cooperative Work (CSCW 2008), San Diego, CA.

#### Other papers and articles

- 1. Starbird, Kate, Dharma Dailey<sup>1</sup>, Ann Hayward Walker, Tom M. Leschine, Robert Pavia, & Ann Bostrom. (2014). White Paper: Sense making through Twitter during the 2010 Gulf Oil Spill. Coastal Response Research Center (CRRC), University of New Hampshire. Durham, New Hampshire, January 2014.
- 2. Starbird, Kate. (2013). Returning to My Inner Nerd: Following the "Social" Disruption of Computing. *Computer Magazine*, *Special Issue on Fostering Gender Diversity in Computing*, 46(3): 63-65.

3. Palen, Leysia, Kate Starbird, Sarah Vieweg and Amanda Hughes. (2010). Twitter-based information distribution during the 2009 Red River Valley flood threat. Bulletin of the American Society for Information Science and Technology, American Society for Information Science and Technology, Volume 36, Issue 5, (June/July 2010), pp. 13-17.

#### **Chapters in edited books**

1. Starbird, Kate, Leysia Palen, Sophia B. Liu, Sarah Vieweg, Amanda Hughes, Aaron Schram, Kenneth Mark Anderson, Mossaab Bagdouri, Joanne White, Casey McTaggart, and Chris Schenk. (2012). Promoting Structured Data in Citizen Communications During Disaster Response: An Account of Strategies for Diffusion of the 'Tweak the Tweet' Syntax. In Christine Hagar (Ed.), *Crisis Information Management: Communication and Technologies*, Cambridge, UK: Woodhead Publishing Limited.

### Papers submitted

1. Dailey, Dharma<sup>1</sup> and Kate Starbird (Revise and Resubmit). Journalists as Crowdsourcerers: Responding to Crisis by Reporting with a Crowd. *Journal of Computer-Supported Cooperative Work, Special Issue: Crisis Informatics and Collaboration.* 

### Other significant research dissemination (web sites, software, Wikis, etc.)

- 1. Starbird, Kate. February 11, 2013. "Humanity Road: A Virtual Volunteer Organization in Disaster Response," *Follow the Crowd* blog. http://crowdresearch.org/blog/?p=4879
- 2. Starbird, Kate. February 6, 2012. "(How) Will the Revolution be Retweeted? Information Diffusion and the 2011 Egyptian Uprising," *Follow the Crowd blog*. http://crowdresearch.org/blog/?author=35

#### **Selected Media Coverage**

- 1. Hendersen, J. April 15, 2014. "Twitter Lessons from the Boston Marathon Bombings." KUOW (NPR affiliate) Radio Interview. http://kuow.org/post/twitter-lessons-boston-marathon-bombings#.U01rVzu0q4M.twitter
- 2. Ma, M. March 18, 2014. "Much misinformation tweeted after 2013 Boston Marathon bombing." *ScienceDaily*. http://www.sciencedaily.com/releases/2014/03/140318124702.htm
- 3. Soper, T. March 18, 2014. "Researchers look to flag false rumors on Twitter during breaking news events," GeekWire. http://www.geekwire.com/2014/boston-marathon-twitter-error-researchers/
- 4. Baer, Drake. November 9, 2012. "As Sandy Became #sandy, Emergency Services Got Social," *Fast Company*. http://www.fastcompany.com/3002837/sandy-became-sandy-emergency-services-got-social
- 5. Petty, Daniel. September 9, 2010. "Evacuees use Social Media to Keep Up on Boulder Wildfire Disaster Developments." *Denver Post:* denverpost.com. http://www.denverpost.com/news/ci 16027417
- 6. Spellman, Jim. September 22, 2010. "Heading off Disaster, One Tweet at a Time." *CNN Tech*.
  - www.cnn.com/2010/TECH/social.media/09/22/natural.disasters.social.media/index.html

7. Lardinois, Frederic. January 19, 2010. "Tweak the Tweet: New Twitter Hashtag Syntax for Sharing Information During Catastrophes." Tech News Daily/ReadWriteWeb. http://readwrite.com/2010/01/19/a new twitter hashtag syntax to help during catast

## OTHER SCHOLARLY ACTIVITY

#### Invited talks, lectures and seminars.

- 1. Collective Intelligence 2014, MIT, Cambridge, MA, Invited Speaker, *Crowdwork during Crisis: Designing for Emergent Collaborations*, June 12, 2014.
- 2. Get the Word Out: Emergency Messaging to Vulnerable Populations Workshop, Tukwila, WA, Keynote Speaker, *Crises, Crowds & Online Convergence: Social Media Use during Disasters*, March 20, 2014.
- 3. University of Washington, Institute for Health Metrics and Evaluation at the University of Washington, *Crowds, Crisis and Convergence: Crowdsourcing in the Context of Disasters*, February 5, 2014.
- 4. Northwestern University, Technology & Social Behavior Distinguished Colloquium Speaker Series, *Crises, Crowds and Online Convergence: Crowdsourcing in the Context of Disasters,* November 21, 2013.
- 5. University of Washington, Engineering for Society Seminar, *Crises, Crowds and Online Convergence: Crowdsourcing in the Context of Disasters*, November 13, 2013.
- 6. National Academy of Engineering, 2013 U.S. Frontiers of Engineering Symposium, Wilmington, Delaware, *Crises, Crowds and Online Convergence: Crowdsourcing in the Context of Disasters*, September 19-21, 2013.
- 7. University of Washington, Presentation for College of Engineering Visiting Committee, Crowdwork, Crisis & Convergence: Understanding Productive Crowdwork during Mass Disruption Events, November 2012.
- 8. University of Washington, Biomedical & Health Informatics Lecture Series, *Crowdwork, Crisis & Convergence: Understanding Productive Crowdwork during Mass Disruption Events*, November 2012.
- 9. University of Washington, Seminar on Current Issues in Human Centered Design & Engineering, Crowds, Crisis & Convergence: Unpacking Crowdsourcing in the Context of Disaster, November 2012.
- 10. Stanford University, Crowds, Crisis & Convergence: Unpacking Crowdsourcing in the Context of Disaster, October 2012.
- 11. Indiana University–Bloomington, *Crowd Computation: How the Crowd Works to Organize Information during Mass Disruption Events*, February 2012.
- 12. ZiF-Research Group, Bielefeld, Germany. *Digital Volunteerism: How Social Media Enables and Structures Collective Action during Disaster*. Presented to ZiF-Research Group Closing Conference for Communicating Disaster. January 26, 2012.
- 13. University of California San Diego, presented to undergraduate course Cognitive Science: Distributed Cognition. *Crowd Computation: Information Organizing by Digital Volunteers during Mass Disruption Events*. October 18, 2011.
- 14. University of Colorado, Engineering Advisory Council Meeting. *Social Media during Crisis:* From Big Data to Information. April 29, 2011.

- 15. University of Colorado, Computer Science Colloquium. *More than the Usual Suspects: The Physical Self and Other Resources for Learning to Program Using a 3D Avatar Environment*. April 14, 2011.
- 16. University of Washington, DUB Talk. *ICT and Critical Environments*. Presented with Leysia Palen, July 15, 2009.

#### Invited panels.

- 1. Microsoft Faculty Summit in Conjunction with the UW iSchool, Bellevue, WA. Panel on Social Computing Challenges at *Toward a Smarter Society: The Role of Computational Social Science*, July 17, 2013.
- 2. DARPA-ISAT Workshop, Los Angeles, CA. Panel on Motivating Scenarios and Use Cases at *Information Science and Technology (ISAT) Workshop on Technology Affordances for Civilian Transparency (TACT)*, January 23, 2013.
- 3. Woodrow Wilson International Center for Scholars, Washington D.C. Panel on Crowdsourced Data Quality at *Connecting Grassroots to Government for Disaster Management*. September, 2012.
- 4. American Red Cross, Washington D.C. Panel on Social Data and Emergency Communications at *Red Cross Emergency Data Summit*, August 12, 2010. (Broadcast and archived on C-SPAN)
- 5. University of Illinois at Urbana-Champaign, IL. Panel on The Great Debate: Be-Geek or De-Geek? at *National Center for Women in Information Technology (NCWIT) Conference*, May 15, 2008.

### Professional society memberships.

Association for Computing Machinery, 2012 – present

### **Program Committees**

iConference, PC Member, iConference 2015

AAAI Conference on Human Computation and Crowdsourcing (HCOMP), PC Member, HCOMP 2014

Information Systems for Crisis Response & Management Conference, Co-Chair Social Media Track, *ISCRAM 2013, ISCRAM 2014, ISCRAM 2015* 

SIGCHI Conference on Computer-Supported Cooperative Work (CSCW), PC Member, CSCW 2014

#### Reviewing

ACM

SIGCHI Conference on Human Factors in Computing Systems (CHI) 2011-2015 SIGCHI Conference on Computer-Supported Cooperative Work (CSCW) 2011-2015 ACM Transactions on Computer-Human Interaction (TOCHI) 2013 SIGCHI Conference on Human-Computer Interaction with Mobile Devices and Services, (MobileHCI) 2013

SIGCHI Conference on Tangible, Embedded, and Embodied Interaction (TEI) 2012 ASIS&T, 2014

Journal of Computer Supported Cooperative Work (JCSCW), 2013, 2014 New Media & Society, 2012, 2014 HCI Journal, 2014
Future Internet, 2013
Information Systems for Crisis Response and Management Conference, 2010-2013
International Journal of Mass Emergencies and Disasters, 2012, 2013
Journal of Computer Mediated Communication, 2012
Journal of Homeland Security and Emergency Management 2010, 2011
Natural Hazards Journal, 2011