

# CURRICULUM VITAE: JACOB THEBAULT-SPIEKER

KnowledgeWorks II  
2202 Kraft Drive  
Blacksburg, Virginia 24060

<http://jacob.thebault-spieker.com>  
[jthebaultspieker@vt.edu](mailto:jthebaultspieker@vt.edu)

## RESEARCH INTERESTS

Bias, social computing, peer production, sharing economy, crowdsourcing, spatial computing

## EDUCATION

- 2017 PhD in Computer Science – University of Minnesota  
Dissertation: *Understanding Geographic Bias in Crowd Systems*  
Co-Advisors: Loren Terveen, Brent Hecht (Northwestern University)  
Committee: Dan Keefe, Kate Starbird (University of Washington)
- 2011 Bachelor of Arts, Computer Science – University of Minnesota – Morris  
Bachelor of Arts, Spanish – University of Minnesota – Morris

## EMPLOYMENT

- Curr. *Virginia Tech*  
Postdoctoral Associate, Department of Computer Science (began Jan. 2018)
- 2014 *IBM Research – Almaden*  
Research Intern (Mentors: Jeff Nichols, Jalal Mahmud)
- 2010 *Carnegie Mellon*  
Summer REU Intern (Mentor: Mahadev Satyanarayanan)

## PUBLICATIONS (Google Scholar Citations: 506, h-index: 7)

### REFEREED PAPERS IN JOURNALS

- [J4] Sukrit Venkatagiri, Jacob Thebault-Spieker, Rachel Kohler, John Purivance, Rifat Sabbir Mansur, and Kurt Luther 2019. GroundTruth: Augmenting Expert Image Geolocation with Crowdsourcing and Shared Representations. *Proc. ACM Hum.-Comput. Interact.* 3, CSCW.
- [J3] Jacob Thebault-Spieker, Daniel Kluver, Maximilian A. Klein, Aaron Halfaker, Brent Hecht, Loren Terveen, and Joseph A. Konstan 2017. Simulation Experiments on (the Absence of) Ratings Bias in Reputation Systems. *Proceedings of the ACM on Human-Computer Interaction* 1, CSCW: 101:1–101:25. <https://doi.org/10.1145/3134736>
- [J2] S. Andrew Sheppard, Julian Turner, Jacob Thebault-Spieker, Haiyi Zhu, and Loren Terveen 2017. Never Too Old, Cold or Dry to Watch the Sky: A Survival Analysis of Citizen Science Volunteerism. *Proc. ACM Hum.-Comput. Interact.* 1, CSCW: 94:1–94:21. <https://doi.org/10.1145/3134729>
- [J1] Jacob Thebault-Spieker, Loren Terveen, and Brent Hecht 2017. Toward a Geographic Understanding of the Sharing Economy: Systemic Biases in Uberx and Taskrabbit. *ACM Trans. Comput.-Hum. Interact.* 24, 3: 21:1–21:40. <https://doi.org/10.1145/3058499>

### REFEREED PAPERS IN CONFERENCES

- [C8] Jacob Thebault-Spieker, Aaron Halfaker, Loren G. Terveen, and Brent Hecht 2018. Distance and Attraction: Gravity Models for Geographic Content Production. In *Proceedings of the 2018 Chi Conference on Human Factors in Computing Systems* (CHI '18), 148:1–148:13. <https://doi.org/10.1145/3173574.3173722>
- [C7] Jacob Thebault-Spieker, Brent Hecht, and Loren Terveen 2018. Geographic Biases Are 'Born, Not Made': Exploring Contributors' Spatiotemporal Behavior in Openstreetmap. In *Proceedings of the 2018 Acm Conference on Supporting Groupwork* (GROUP '18), 71–82. <https://doi.org/10.1145/3148330.3148350>

- [C6] Hannah Miller, Daniel Kluver, Jacob Thebault-Spieker, Loren Terveen, and Brent Hecht 2017. Understanding Emoji Ambiguity in Context: The Role of Text in Emoji-Related Miscommunication. In *Eleventh International Aaai Conference on Web and Social Media (ICWSM '17)*.
- [C5] Jacob Thebault-Spieker\*, Ashley Colley\*, Allen Yilun Lin\*, Donald Degraen, Benjamin Fischman, Jonna Häkklä, Kate Kuehl, Valentina Nisi, Nuno Jardim Nunes, Nina Wenig, Dirk Wenig, Brent Hecht\*\*, and Johannes Schöning\*\* 2017. The Geography of Pokémon Go: Beneficial and Problematic Effects on Places and Movement. In *Proceedings of the 2017 Chi Conference on Human Factors in Computing Systems (CHI '17)*, 1179–1192. <https://doi.org/10.1145/3025453.3025495> (\* indicates co-first-author, \*\* - indicates co-Principal Investigators)
- [C4] Andrew Hall, Sarah McRoberts, Jacob Thebault-Spieker, Yilun Lin, Shilad Sen, Brent Hecht, and Loren Terveen 2017. Freedom Versus Standardization: Structured Data Generation in a Peer Production Community. In *Proceedings of the 2017 Chi Conference on Human Factors in Computing Systems (CHI '17)*, 6352–6362. <https://doi.org/10.1145/3025453.3025940>
- [C3] Hannah Miller, Jacob Thebault-Spieker, Shuo Chang, Johnson Isaac, Loren Terveen, and Brent Hecht 2016. "Blissfully Happy" or "Ready to Fight": Varying Interpretations in Emoji. In *Proceedings of the 10th International Conference on Web and Social Media (ICWSM '16)*.
- [C2] Jacob Thebault-Spieker, Loren G. Terveen, and Brent Hecht 2015. Avoiding the South Side and the Suburbs: The Geography of Mobile Crowdsourcing Markets. In *Proceedings of the 18th Acm Conference on Computer Supported Cooperative Work & Social Computing (CSCW '15)*, 265–275. <https://doi.org/10.1145/2675133.2675278>
- [C1] Aaron Halfaker, Oliver Keyes, Daniel Kluver, Jacob Thebault-Spieker, Tien Nguyen, Kenneth Shores, Anuradha Uduwage, and Morten Warncke-Wang 2015. User Session Identification Based on Strong Regularities in Inter-Activity Time. In *Proceedings of the 24th International Conference on World Wide Web (WWW '15)*, 410–418. <https://doi.org/10.1145/2736277.2741117>

#### REFEREED NONARCHIVAL WORKSHOP PAPERS

- [w4] Sukrit Venkatagiri, Jacob Thebault-Spieker, Aliza Camacho, and Kurt Luther 2018. Localness and Urbanness in Geographic Crowd Work. In (CSCW '19 Companion).
- [w3] Jacob Thebault-Spieker, Brent Hecht, and Loren Terveen 2015. Digitally Reflecting Our Space: Crowdsourcing Space Usage Rules. In (Information Technology and City Life Workshop - Cscw '15).
- [w2] Jacob Thebault-Spieker 2013. CitizenSense: A Geographic Collective Intelligence Platform. In *Symposium on Urban Informatics Exploring Smarter Cities* (Symposium on Urban Informatics Exploring Smarter Cities).
- [w1] Jacob Thebault-Spieker 2010. Can Protocol and Application Layer Statistics Improve Client-Server Responsiveness? In *Midwest Instructional Computing Symposium (MICS '10)*.

#### REFEREED NONARCHIVAL CONFERENCE PAPERS (DEMOS, POSTERS, EXTENDED ABSTRACTS, ETC.)

- [p1] Jacob Thebault-Spieker, Anbang Xu, Jilin Chen, Jalal Mahmud, and Jeffrey Nichols 2016. Exploring Engagement in a 'Social Crowd' on Twitter. In *Proceedings of the 19th Acm Conference on Computer Supported Cooperative Work and Social Computing Companion (CSCW '16 Companion)*, 417–420. <https://doi.org/10.1145/2818052.2869112>

#### REFEREED DOCTORAL CONSORTIA

- [dc1] Jacob Thebault-Spieker 2016. Quantifying, Understanding, and Mitigating Crowd Work Bias. In *Fourth Aaai Conference on Human Computation and Crowdsourcing (HCOMP '16 Doctoral Consortium)*.

## GRANTS AND AWARDS

#### GRANTS AWARDED AS A STUDENT

- [g3] Social Media and Business Analytics Collaborative (SOBACO) Travel Grant. Total: \$1500
- [g2] Social Media and Business Analytics Collaborative (SOBACO) Travel Grant. Total: \$1000
- [g1] Undergraduate Research Opportunity Program Grant. Total: \$1400

## OTHER RESEARCH ACTIVITIES

### RESEARCH CAMPS

*CSST: Summer Research Institute for the Science of Socio-Technical Systems*  
CSST 2019, New Brunswick, NJ, USA, June 18-22, 2019

## TEACHING

AS GRADUATE TEACHING ASSISTANT AT UNIVERSITY OF MINNESOTA

*CS5115: User Interface Design.*

Fall 2017.

*CS1902: Structure of Computer Programming II.*

Fall 2011, Spring 2012.

AS UNDERGRADUATE TEACHING ASSISTANT AT UNIVERSITY OF MINNESOTA - MORRIS

*CS3401: Models of Computing Systems.*

Fall 2010, Spring 2011.

## PROFESSIONAL SERVICE

### ORGANIZING COMMITTEES

**2019** CSCW Publications Co-Chair

Co-Editor of ‘Negotiating Trust and Truth in Socio-Technical Systems’ special issue of Transactions on Social Computing

### PROGRAM COMMITTEES

**2018:** CHI Late-Breaking Work

Emoji2018: 1st International Workshop on Emoji Understanding and Applications in Social Media

### REVIEWING

#### Journals

ACM Transactions on Computer-Human Interaction (TOCHI)

Interaction Design and Architecture (IxD&A)

ACM Transactions on Social Computing (TSC)

#### Conference Proceedings

CSCW

CHI (*recognized as an Excellent Reviewer in: 2017, 2018*)

UbiComp (*recognized as an Excellent Reviewer in 2016*)

MobileHCI

ICWSM