# Research Agenda

My research centers on identifying the socio-technical arrangements that enhance learning and motivation among contributors to human computer systems - specifically, I implement and evaluate design epistemologies that improve user experience in virtual citizen science projects.

## Education

2019 **Ph.D. in Information Science & Technology**, School of Information Studies, Syracuse University.

Dissertation Title: Characterizing Novelty as a Motivator in Online Citizen Science

Committee: Kevin Crowston (Chair), Dan Cosley, Catsten Østerlund, Jeffery Saltz, Steve Sawyer, Bryan Semaan

- 2012 Master of Science in Library & Information Science, University of Illinois Urbana-Champaign, Urbana, Illinois.
- 2010 Bachelor of Arts in Political Science, University of Illinois Urbana-Champaign, Urbana, Illinois.

# **Employment**

2021-Current Assistant Professor, Information School, University of Wisconsin-Madison.

Affiliations: Robert F. and Jean E. Holtz Center for Science and Technology Studies

American Family Insurance Data Science Institute

UniverCity Alliance

- 2020-2021 **Anna Julia Cooper Postdoctoral Fellow**, The Information School, University of Wisconsin-Madison.
- 2019-2020 Postdoctoral Scholar, School of Information, University of California, Berkeley.
- 2018-2020 Lecturer, School of Information Studies, Syracuse University.
- 2018-2019 Lecturer, School of Information, University of California, Berkeley.
- Summer 2016 **Research Intern**, IBM, Almaden Research Center. Research Advisors: Laura Anderson and Cheryl Kieliszewski
- Summer 2012 Systems Analyst Intern, Allstate Insurance.

# Awards

- 2020 ACM CSCW, Honorable Mention for Best Paper (Top 5% of all submissions), "Shifting forms of Presence: Volunteer Learning in Online Citizen Science".
  - Human Side of Service Engineering Honorable Mention for Best Paper for Best Paper Award, "Methodological Reinforcements: Investigating Work through Trace Data and Text".
- 2019 ASIS&T SIG SI Social Informatics Honorable Mention for Best Paper, "Folksonomies to Support Coordination and Coordination of Folksonomies". Computer Supported Cooperative Work (CSCW), 2019.
- 2012 GSLIS Berger Entrepreneurial Promise Award.

#### Federal Grants

NSF CRII-1464347 - SaTC: Privacy-Enhancing User Interfaces Based on Individualized Mental Models Investigators: Yang Wang (PI); Period: 2015-2017; Amount: \$175,586 (Co-authored grant)

#### **Private Grants**

The Rockefeller Foundation: The COVID-19 Fairness in Resource Allocation (FIRA) Engine. Investigators: Corey Jackson (PI); Period: Summer 2021; Amount: \$50,000

#### Fellowships

Research Data Alliance/United States Fellowship, 2015 i3 PhD Teaching Fellowship, 2015 Science, Technology, Engineering, and Mathematics (STEM) Fellowship, 2013-2015 Elizabeth Liddy Fellowship, 2013–2015 Graduate Assistance in Areas of National Need (GAANN) Fellowship, 2012–2013 Midwest Access Program Fellowship, 2010–2012 Freeman Study Abroad Fellowship, 2006

#### Travel Grants

Ubi-Comp, 2018 Conference on Online Social Networks (COSN), 2014

### Publications

### Refereed Journal Publications (total: 9)

- 2021 Soni, S., Berry, C. P. L., Coughlin, S. B., Harandi, M., Jackson, C. B., Crowston, K., ... & Zhang, C. Discovering features in gravitational-wave data through detector characterization, citizen science and machine learning. *arXiv preprint*.
- 2020 Jackson, C.B., Crowston, K., Harandi, M., Østerlund, and Trouille, L. Shifting forms of Presence: Volunteer Learning in Online Citizen Science. *Proc. ACM Hum.-Comput. Interact.*, 4, CSCW1, article 036. doi:https://doi.org/10.1145/3392841.
  - Jackson, C.B., Østerlund, C., Crowston, K., Harandi, M., Allen, S., Bahaadini, S., Coughlin, S., Katsaggelos, A., Larson, S., Rohani, N., Smith, J., Trouille, L., Zevin, M. Teaching Citizen Scientists to Categorize Glitches using Machine Learning Guided Training. *Computers in Human Behaviour*, 105, 106198. doi: 10.1016/j.chb.2019.106198.
  - Østerlund, C., Crowston, K., Jackson, C.B. Building an apparatus: Refractive, reflective and diffractive readings of trace data. *Journal of the Association for Information Systems* (*JAIS*), 21(1), article 10. doi: 10.17705/1jais.00590.
  - Crowston, K., Østerlund, C., Lee, T., Jackson, C.B., Harandi, M., Allen, S., Bahaadini, S., Coughlin, S., Katsaggelos, A., Larson, S., Rohani, N., Smith, J., Trouille, L., Zevin, M. Knowledge Tracing to Model Learning in Online Citizen Science Projects. *IEEE Transactions on Learning Technologies (TLT)*, 13(1), 123–134. doi: 10.1109/TLT.2019.2936480.
- 2019 Coughlin, S. Bahaadini, S., Rohani, N., Zevin, M., Patane, O., Harandi, M., Jackson, C.B., Noroozi V., Allen, S., Areeda, J., Coughlin, M., Ruiz, P., Berry, C P L., Crowston, K., Østerlund, C., Smith, J.R., Trouille, L., Kalogera, V. Classifying the unknown: Discovering novel gravitational-wave detector glitches using similarity learning. *Physical Review D*, 99(8), 082002. doi: 10.1103/PhysRevD.99.082002.

- 2018 Jackson, C.B., Crowston, K., Østerlund, C. Did they login?: Patterns of Anonymous Contributions in Online Communities. *Proc. ACM Hum.-Comput. Interact.* 2, CSCW, Article 77 (November 2018), 16 pages. DOI:https://doi.org/10.1145/3274346.
  - Jackson, C.B., Crowston, K., Østerlund, C., Harandi, M. Folksonomies to Support Coordination and Coordination of Folksonomies. *Computer Supported Cooperative Work (CSCW)*, 27(3–6), 647–678. doi: 10.1007/s10606-018-9327-z.
  - Jackson, C.B., Wang, Y. Addressing Privacy Discrepancy through Personalized Notifications. *Proc. ACM Interact. Mob. Wearable Ubiquitous Technol.* 2, 2, Article 68 (July 2018), 25 pages. DOI:https://doi.org/10.1145/3214271.
- 2015 Jackson, C.B., Huang, Y., Kasowitz-Scheer, A.S. Face-to-Face Matters: Inspirations from the Human Library. *International Journal of Mobile Human Computer Interaction*, 7(3), pp. 42-54.

# Referred Conference Proceedings (total: 8)

- 2020 Harandi, M., Crowston, K., Jackson, C.B., Østerlund, C. The Genie in the Bottle: Different Stakeholders, Different Interpretations. *In Proceedings of the Hawai'i International Conference on System Sciences* (HICSS-53), Wailea, HI, 8–11 January.
- 2019 Jackson, C.B., Østerlund, C., Harandi, M., Kharwar, D., Crowston, K. Linguistic Changes in Online Citizen Science: A Structurational Perspective. *In Proceedings of the International Conference on Information Systems (ICIS 2019)*, Munich, Germany, 15–18 December.
- 2016 Jackson, C.B., Crowston, K., Mugar, G., Østerlund, C. "Guess what! You're the first to see this even" Increasing Contribution to Online Production Communities. In Proceedings of the ACM Conference on Supporting Groupwork (GROUP 2016), Sanibel Island, FL, 12–16 October. doi: 10.1145/2957276.2957284.
  - Jackson, C.B., Østerlund, C., Maidel, V., Crowston, K., and Mugar, G. Which Way Did They Go? Newcomer Movement through the Zooniverse. *In Proceedings of the ACM Conference on Computer Supported Cooperative Work and Social Computing (CSCW 2016)*, San Francisco, CA, 27 February–2 March. doi: 10.1145/2818048.2835197.
- 2015 Mugar, G., Østerlund, C., Jackson, C.B., and Crowston, K. Being present in online communities: learning in citizen science. *In Proceedings of the International Conference on Communities and Technologies (C&T 2015)*, Limerick, Ireland.
- 2014 Jackson, C.B., Østerlund, C., Crowston, K., Mugar, G., Hassman, K.D. Motivations for Sustained Participation in Citizen Science: Case Studies on the Role of Talk. *In Proceedings* of the Hawai'i International Conference on System Sciences (HICSS-48), Koloa, HI, 5–8 January. doi: 10.1109/HICSS.2015.196.
  - Mugar, G., Østerlund, C., Hassman, K.D., Crowston, K., and Jackson, C.B. Planet hunters and seafloor explorers: legitimate peripheral participation through practice proxies in online citizen science. *In Proceedings of the ACM Conference on Computer Supported Cooperative Work and Social Computing (CSCW 2014)*, Baltimore, MD, 15–19 February. doi: 10.1145/2531602.2531721.
- 2013 Hassman, K.D., Mugar, G., Østerlund, C., Jackson, C.B. Learning at the Seafloor, Looking at the Sky: The Relationship Between Individual Tasks and Collaborative Engagement in Two Citizen Science Projects. *In Proceedings of the International Conference on Computer Supported Collaborative Learning (CSCL 2013)* Madison, WI.

### Referred Short Papers (total: 4)

- 2021 Ekstron, B., Jackson, C.B., and Østerlund. Tracing Hyperlinks: How to support different forms of presence and knowledge production in an online citizen science community? *Meeting of the Society for the Social Studies of Science*. **4S**.
- 2020 Jackson, C.B., Anderson, L., and Kieliszewski, C.A. Methodological Reinforcements: Investigating Work through Trace Data and Text. In: Spohrer J., Leitner C. (eds) Advances in the Human Side of Service Engineering. AHFE 2020. Advances in Intelligent Systems and Computing, vol 1208. Springer, Cham).
- 2018 Jackson, C.B., Crowston, K., and Østerlund, C. Working in the Shadows: A Cross-Case Analysis of Anonymous Contributions in Online Citizen Science Communities. Presentation at *InfoSocial*, Northwestern University, Evanston, IL.
- 2016 Østerlund, C., Crowston, K., Jackson, C.B. The hermeneutics of trace data: Building an apparatus. Presentation at the *IFIP Working Group 8.2 Working Conference (IFIP 8.2)*, Dublin, Ireland, 9- 10 December.

## Referred Conference Posters (total: 6)

- Accepted Clogs in the Pipeline: The Challenges that Facilitators Face in Executing Digital Citizen Science Projects. (with L. Trouille, Cliff J., and Michelle N.). Poster at the *CitSciVirtual 2021*.
  - 2018 Talking the Talk in Citizen Science. (with M. Harandi, Carsten Ø, and K. Crowston). Poster at the ACM Conference on Computer Supported Cooperative Work and Social Computing (CSCW 2018), Jersey City, NJ. DOI:https://doi.org/10.1145/3272973.3274084.
  - 2016 Encouraging work in citizen science: Experiments in goal setting and anchoring (with K. Crowston, G. Mugar and C. Østerlund). Poster at the ACM Conference on Computer Supported Cooperative Work and Social Computing (CSCW 2016), San Francisco, CA, 27 February–2 March. DOI: 10.1145/2818052.2869129.
  - 2015 Beyond data management: Exploring new roles for librarians in citizen science projects (with K. Hassman, C. Østerlund, G. Mugar & K. Crowston). Poster at the *Citizen Science Conference*, San Jose, CA, 11–12 February.
  - 2014 Event-based analysis of a citizen science community: Are new non–sustained users included? (with C. Østerlund, C. B. Jackson, G. Mugar & K. D. V. Hassman). Poster at the *iConference* 2014, Berlin, Germany, 4–7 March.
    - Networks of Influential Participants: Information Diffusion in Citizen Science. (with C. Østerlund, G. Mugar, K. Crowston, K.D. Hassman). Poster at the *ACM conference on Online social networks* (*COSN 2014*), Dublin, Ireland, 1–2, October.
  - 2013 Learning at the Seafloor, Looking at the Sky: The Relationship Between Individual Tasks and Collaborative Engagement in Two Citizen Science Projects (with K.D. Hassman, G Mugar, C. Østerlund). Poster at the *International Conference on Computer Supported Collaborative Learning (CSCL 2013)*, Madison, WI.

### Workshop Presentations (total: 2)

2016 Østerlund, C., Mugar, G., Jackson, C.B., Crowston, K. Typologies of Learning in Open Online Collaborative Communities. In Thomas Ludwig, Karin Hansson, Michael Muller, Tanja Aitamurto, Neha Gupta (Eds.), International Reports on Socio-Informatics (IRSI), Proceedings of the CSCW 2016 – Workshop: Toward a Typology of Participation in Crowdwork, 13(1), 15–22.

2015 Mugar, G., Østerlund, C., Jackson, C.B., Crowston, K. Learning and Motivation in the Zooniverse. Presented at workshop on Advancing an industry/academic partnership model for open collaboration research. *In Proceedings of the ACM Conference on Computer Supported Cooperative Work (CSCW 2015)*. Vancouver, BC, Canada.

### Presentations at Scientific Meetings (total: 2)

- 2014 Socializing the Crowd: Learning to Talk in Citizen Science (with Østerlund, C., Mugar, G., Hassman, K.D., Crowston, K.). Presentation at the OCIS Division, *Academy of Management Conference*, Philadelphia, PA, 1–5 August.
- 2016 The hermeneutics of trace data: Building an apparatus (with C. Østerlund and K. Crowston). Presentation at the *IFIP Working Group 8.2 Working Conference (IFIP 8.2)*, Dublin, Ireland, 9–10 December.

Thesis

2019 Characterizing Novelty as a Motivator in Online Citizen Science. Dissertations - ALL. 1046. Available: https://surface.syr.edu/etd/1046.

# Invited Talks and Other Presentations

2020 Constructing the Digital Commons: Engaging Publics in Research through Citizen Science. Presented at the Information School, Madison, Wisconsin.

Designing for an Inclusive COVID Response. Presented to the American Family Insurance Data Science Institute. Madison, Wisconsin.

A Shifting Paradigm: Engaging Publics in Research through Citizen Science. Presented at the Information School, Madison, Wisconsin.

Piecing Together Practices through Trace Data. Presented at the Information School, Madison, Wisconsin.

- 2019 Citizen Science: Understanding Online User Behaviors and Technologies. Presented at the Information School, Madison, Wisconsin.
- 2015 Voices from the Field. Presented at the GEM GRAD Lab (Getting Ready for Advanced Degree Laboratory), Syracuse, New York.

Ethnography in Citizen Science. The 2nd Annual Graduate Research Symposium, Syracuse University, March 20-21, 2015, Syracuse, NY.

2013 Data and Ethics in Citizen Science. 7th Research Data Alliance Plenary, Paris, France.

### Teaching

2020 **W201**, Research Design and Applications for Data and Analysis, 2 sections. University of California Berkeley, School of Information

IST 687, Applied Data Science.

Syracuse University, School of Information Studies

2019 W201, Research Design and Applications for Data and Analysis, 7 sections. University of California Berkeley, School of Information

IST 687, Applied Data Science.

Syracuse University, School of Information Studies

2018 W201, Research Design and Applications for Data and Analysis, Instructor, 4 sections.

University of California Berkeley, School of Information

IST 687, Applied Data Science.

Syracuse University, School of Information Studies

2015 NA, Programming in Python.

Teaching Fellow, iSchool Inclusion Institute (i3), University of Pittsburgh

IST 444, Information Reporting and Presentation.

Teaching Assistant, Syracuse University, School of Information Studies

2014 IST 755, Strategic Information Management.

Teaching Assistant, Syracuse University, School of Information Studies

2013 IST 755, Strategic Information Management.

Teaching Assistant, Syracuse University, School of Information Studies

2012 IST 687, Applied Data Science.

Teaching Assistant, Syracuse University, School of Information Studies

# Student Mentoring

### Undergraduate Students

Philip Lee, Syracuse University

Noah David Leiboff, Syracuse University

Eddie Huang, University of Illinois, Urbana-Champaign

Tajanae Harris, Syracuse University

Michelle Nightoak, University of Wisconsin, Madison

Xin Bu, University of Wisconsin, Madison

Shihao Yang, University of Wisconsin, Madison

#### **Graduate Students**

Netra Prakash Kayastha, Syracuse University

Amruta Bhat Syracuse University

Dhruv Kharwar, Syracuse University, research practicum on linguistic changes, (work led to ICIS publication)

Saurabh Patel, Syracuse University

Akshay Bagde, Syracuse University

Jay Park, Syracuse University

Wenzhe Yang, Syracuse University

### Academic and Professional Service

#### **Conference Committees**

ACM CSCW'20, Video Presentation Co-Chair

ACM CSCW'21, Data Wrangler

#### Journal Reviewing

The Journal of Information Technology

The Journal of Collaborative Computing and Work Practices (CSCW)

International Journal of Human - Computer Studies

### Conference Reviewing

The International Conference on Information Systems (ICIS)

ACM/SigCHI Conference in Human Factors in Computing (CHI)

ACM/SigCHI Conference on Computer Supported Collaborative Work (CSCW)

Symposium on Usable Privacy and Security (SOUPS)

Hawai'i International Conference on System Sciences (HICSS)

#### Service at University of Wisconsin, Madison

American Family Insurance Data Science Institute Strategic Thinking Group

#### Service as a graduate student

Doctoral Committee, School of Information Studies, Syracuse University, 2013-2013, 2016-2017 Faculty Search Committee, School of Information Studies, Syracuse University, 2015-2016 Faculty Committee Rep., School of Information Studies, Syracuse University, 2014-2015 Senator, Graduate Student Organization, Syracuse University, 2013-2014 University Senator, Syracuse University, 2013-2014 University Senate Research Committee, Syracuse University, 2013-2014 Dean of Students Search Committee Member, University of Illinois Urbana-Champaign, 2007-2008 Senate Sub-Committee on Student Discipline, University of Illinois Urbana-Champaign, 2006-2009

### - Press

- 2021 University of Wisconsin News, "Off to a busy start, data institute responds to COVID and seeks director".
- 2016 **Daily Orange**, "Syracuse University researchers continue to further gravitational wave research".
- 2015 Symmetry Magazine, "Citizen scientists join search for gravitational waves". ischool.syr.edu, "Ph.D. Student Jackson Receives Two Prestigious Fellowships".
- 2014 Syracuse.com, "Student startups win thousands at Emerging Talk event".
- 2009 **ischool.illinois.edu**, "Grant Awarded to Illinois Students Helps Bring Laptops to São Tomé, Africa".