

Shion Guha

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RESEARCH INTERESTS algorithmic ethics, privacy, social networks, computational social science, ictd

APPOINTMENTS **Marquette University**, Milwaukee, WI, USA **August 2016 -**
Assistant Professor, Department of Mathematics, Statistics and Computer Science

Direct Supply, Milwaukee, WI, USA **July 2017 - August 2017**
Visiting Researcher, Data Science Division

IBM Research, Cambridge, MA, USA **May 2015 - August 2015**
Summer Research Intern, Data Science User Experience Group

FUNDING Uline: \$10,000 yearly recurring gift for data science program development, January 2018.
National Science Foundation: travel grant (\$500) for Panel and Workshop on Trustworthy Algorithms, Arlington VA December 2017.
National Science Foundation: Co-PI, PFI #1718630 (\$1,000,000), June 2017. This was recommended for funding by the panel but ultimately couldn't be given money due to lack of budget.
Direct Supply: PI, research award 2017 (\$10,356) for "Supply Chain Network Analysis", June 2017
Marquette University: co-PI, Mellon grant 2017 (\$5000) for "Spatial Data Analytics"
NSF CSST: summer research institute travel grant 2016 (\$675)
Facebook: CHI 2016 workshop travel grant (\$1200)
Cornell University: graduate school conference grant 2013, 2016. (\$1000)

EDUCATION **Cornell University**, Ithaca, New York USA
Ph.D, Information Science, Statistics, 2016
M.S, Information Science, 2014

Indian Statistical Institute, Bangalore, Karnataka India
M.S, Information Science, 2010

Jadavpur University, Kolkata, West Bengal India
B.B.A, Finance, 2008

JOURNAL ARTICLES **J9.** Jess C Hohenstein, Eric PS Baumer, Lindsay Reynolds, Elizabeth Lindley Murnane, Dakota O'Dell, Seoho Lee, **Shion Guha**, Yu Qi, Erin Rieger, Geri Gay. 2018. Supporting Accurate Interpretation of Self-Administered Medical Test Results for Mobile Health: Assessment of Design, Demographics, and Health Condition. *Journal of Medical Internet Research Human Factors* 2018;5(1):e9. doi: 10.2196/humanfactors.8620

J8. Syed Ishtiaque Ahmed, **Shion Guha**, Md. Rifat Raashidujjaman, Faysal Hossain and Nicola Dell. 2017. Privacy in Repair: An Analysis of the Privacy Challenges Surrounding Broken Digital

Artifacts in Bangladesh. *Information Technologies & International Development*, vol 13, 186-199.
url: <http://itidjournal.org/index.php/itid/article/view/1587>

J7. Mark Matthews, Elizabeth Murnane, Jaime Snyder, **Shion Guha**, Pamara Chang, Gavin Doherty, and Geri Gay. 2017. The Double-Edged Sword: A Mixed Methods Study Of The Interplay Between Bipolar Disorder and Technology use. *Computers in Human Behavior*, Vol 75, Pg. 288-300. doi: <https://doi.org/10.1016/j.chb.2017.05.009>

J6. Eric P.S. Baumer, David Mimno, **Shion Guha**, Emily Quan and Geri Gay. 2017. Comparing Grounded Theory and Topic Modeling: Extreme Divergence or Unlikely Convergence? *Journal of the Association of Information Science and Technology*. doi:10.1002/asi.23786

J5. Elizabeth Murnane, Dan Cosley, Pamara Chang, **Shion Guha**, Ellen Frank, Geri Gay and Mark Matthews. 2016. Self-Monitoring Practices, Attitudes, and Needs of Individuals with Bipolar Disorder: Implications for the Design of Technologies to Manage Mental Health. *Journal of the American Medical Informatics Association*. doi: 10.1093/jamia/ocv165

J4. Eric P.S. Baumer, **Shion Guha**, Emily Quan, David Mimno and Geri Gay. 2015. How Social Media Non-use Influences the Likelihood of Reversion: Self Control, Being Surveilled, Feeling Freedom, and Socially Connecting. *Social Media + Society*, Vol 1, No. 2. doi: 10.1177/2056305115614851

J3. Jeremy Birnholtz, **Shion Guha**, Geri Gay, Y. Connie Yuan, and Caren Heller. 2013. Cross-campus collaboration: A scientometric and network case study of publication activity across two campuses of a single institution. *Journal of the American Society of Information Science and Technology*. Vol. 64, No. 1, Pg. 162-172. doi: 10.1002/asi.22807

J2. **Shion Guha**, Biswajit Thakur and Shibnath Chakrabarty. 2010. Collaboration in a Web Enabled Design Management System - A Case Study in Kolkata, India. *Journal of Information Technology in Construction*, Vol. 15, Pg. 86 - 107.

J1. **Shion Guha**. 2007. Valuation of Clean Water Supply by Willingness to Pay Method in a Developing Nation: A Case Study in Calcutta, India. *Journal of Young Investigators*, (JYI) Vol. 17, No. 4.

CONFERENCE
PROCEEDINGS

C17. Arup Kumar Ghosh, Karla Badillo-Urquiola, **Shion Guha**, Joseph J. LaViola Jr, and Pamela J. Wisniewski. 2018. Safety vs. Surveillance: What Children Have to Say about Mobile Apps for Parental Control. In Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems (CHI '18). ACM, New York, NY, USA, Paper 124, 14 pages.

C16. Heather Bort, **Shion Guha** and Dennis Brylow. The Impact of Exploring Computer Science in Wisconsin: Where Disadvantage is an Advantage. In Proceedings of the 23rd Annual Conference on Innovation and Technology in Computer Science Education, Larnaca, Cypress, June 2018. (to appear)

C15. **Shion Guha**, Eric P.S. Baumer, and Geri K. Gay. 2018. Regrets, I've Had a Few: When Regretful Experiences Do (and Don't) Compel Users to Leave Facebook. In Proceedings of the 2018 ACM Conference on Supporting Groupwork (GROUP '18). ACM, New York, NY, USA, 166-177. **(Best of GROUP, top 5% of papers, invited to ToSC special issue)**

C14. Syed Ishtiaque Ahmed, Md. Romael Haque, **Shion Guha**, Md. Rashidujjaman Rifat, and Nicola Dell. 2017. Privacy, Security, and Surveillance in the Global South: A Study of Biometric Mobile SIM Registration in Bangladesh. In Proceedings of the 2017 CHI Conference on Human Factors in Computing Systems (CHI '17), 906-918.

- C13.** Eric P.S. Baumer, Xiaotong Xu, Christine Chu, **Shion Guha**, and Geri K. Gay. 2017. When Subjects Interpret the Data: Social Media Non-use as a Case for Adapting the Delphi Method to CSCW. In Proceedings of the 2017 ACM Conference on Computer Supported Cooperative Work and Social Computing (CSCW '17), 1527-1543.
- C12.** Michael Muller, **Shion Guha**, Eric P.S. Baumer, David Mimno, and N. Sadat Shami. 2016. Machine Learning and Grounded Theory Method: Convergence, Divergence, and Combination. In Proceedings of the 19th International Conference on Supporting Group Work (GROUP '16). 3-8.
- C11.** Michael Muller, N. Sadat Shami, **Shion Guha**, Mikhail Masli, Werner Geyer, and Alan Wild. 2016. Influences of Peers, Friends, and Managers on Employee Engagement. In Proceedings of the 19th International Conference on Supporting Group Work (GROUP '16). 131-136.
- C10.** **Shion Guha**, Michael Muller, N Sadat Shami, Mikhail Masli and Werner Geyer. 2016. Using Organizational Social Networks to Predict Employee Engagement. In Proceedings of the Tenth International AAAI Conference on Weblogs and Social Media (ICWSM'16). 571-574.
- C9.** Syed Ishtiaque Ahmed, **Shion Guha**, Md. Rifat Raashidujjaman, Faysal Hossain and Nicola Dell. 2016. Privacy in Repair: Challenges around the Broken Digital Objects in Bangladesh. In Proceedings of the Eighth ACM International Conference on Information and Communication Technologies and Development (ICTD'16). Article 11, 10 pages. (**Best of ICTD, top 5% of papers**)
- C8.** **Shion Guha** and Stephen B. Wicker. 2015. Spatial Subterfuge: An Experience Sampling Study To Predict Deceptive Location Disclosures. In Proceedings of the 2015 ACM International Joint Conference on Pervasive and Ubiquitous Computing (UbiComp'15). 1131-1135.
- C7.** **Shion Guha** and Stephen B. Wicker. 2015. Do Birds Of The Same Feather Watch Each Other?: Homophily and Social Surveillance in Location Based Social Networks. In Proceedings of the 18th ACM Conference on Computer Supported Cooperative Work and Social Computing (CSCW'15). 1010-1020.
- C6.** **Shion Guha**, and Jeremy Birnholtz. 2013. Can You See Me Now? Location, Visibility, and the Management of Impressions on foursquare". In Proceedings of the 15th International Conference on Human Computer Interaction with Mobile Devices and Services (MobileHCI'13). 183-192.
- C5.** **Shion Guha**, Stephanie Steinhardt, Syed Ishtiaque Ahmed and Carl Lagoze. 2013. Following Bibliometric Footprints: Computer Science and the ACM Digital Library". In Proceedings of the 13th ACM/IEEE-CS joint conference on Digital Libraries (JCDL'13). 139-142.
- C4.** **Shion Guha**. 2009. Collaborative Web Based Construction Informatics - A Learning Sciences Approach in an Indian context. In Proceedings of the International Conference on Software Technology and Engineering (ICSTE'09), World Scientific Press, ISBN 978-981-4289-97-9.
- C3.** **Shion Guha**. 2007. Planning with Uncertainties in a Heritage Building Restoration Project. In Proceedings of the IEEE International Conference on Industrial Engineering and Engineering Management (IEEM'07), ISBN 978-1-4244-1529-8.
- C2.** **Shion Guha**. 2007. Construction Management Through Web Services in Calcutta, India. In Proceedings of the International Conference on Business Informatics (IBIC'07), Logos Verlag Berlin, ISBN 978-3-8325-1869-1.
- C1.** **Shion Guha**. 2007. Time Estimate of a Heritage Building Restoration Project by Monte Carlo Simulation. In Proceedings of the International Conference on Modeling and Simulation (CITI-

COMS'07).

EXTENDED
ABSTRACTS

SIG2. Chat Wacharamanotham, Matthew Kay, Steve Haroz, **Shion Guha**, and Pierre Dragicevic. 2018. Special Interest Group on Transparent Statistics Guidelines. In Extended Abstracts of the 2018 CHI Conference on Human Factors in Computing Systems (CHI EA '18). ACM, New York, NY, USA, Paper SIG08, 4 pages.

W7. Matthew Kay, Steve Haroz, **Shion Guha**, Pierre Dragicevic, and Chat Wacharamanotham. 2017. Moving Transparent Statistics Forward at CHI. In Proceedings of the 2017 CHI Conference Extended Abstracts on Human Factors in Computing Systems (CHI EA '17), 534-541.

W6. Shion Guha. 2016. Everyday Algorithmic Decisions and their Consequences. Ethics and Obligations for Studying Digital Communities Workshop. (GROUP'16)

SIG1. Matthew Kay, Steve Haroz, **Shion Guha** and Pierre Dragicevic. Special Interest Group on Transparent Statistics in HCI. In Proceedings of the 2016 CHI Conference Extended Abstracts on Human Factors in Computing Systems (CHI EA '16). 1081-1084.

W5. Shion Guha, Md. Rifat Rashidujjaman, Syed Ishtiaque Ahmed and Nicola Dell. 2016. Privacy and Security in HCI4D Research. HCI Across Borders Workshop. CHI 2016.

W4. Michael Muller, **Shion Guha**, Eric Baumer, David Mimno and N Sadat Shami. 2016. Crowd Influences on Employee Engagement: Comparing Influences of Managers, Peers, and Network Friends. Towards a Typology of Participation in Crowdwork Workshop. CSCW 2016.

W3. Shion Guha, Michael Muller, Eric Baumer, David Mimno and N Sadat Shami. 2016. Connecting Grounded Theory and Machine Learning: Proposing Research Directions in Human Centered Data Science. Human Centered Data Science Workshop. CSCW 2016.

P2. Syed Ishtiaque Ahmed, **Shion Guha** and Md. Rashidujjaman Rifat. 2014. Privacy Concerns in Repairing. *In 10th ACM Symposium on Usable Privacy and Security (SOUPS 14)*.

P1. Syed Ishtiaque Ahmed, Maruf Zaber, and **Shion Guha.** 2013. Usage of the memory of mobile phones by illiterate people. In Proceedings of the 3rd ACM Symposium on Computing for Development (ACM DEV '13), Article 42 , 2 pages.

W1. Syed Ishtiaque Ahmed and **Shion Guha.** 2012. Distance Matters: An Exploratory Analysis of the Linguistic Features of Flickr Photo Tag Metadata in Relation to Impression Management. In Proceedings of the 2nd ACM SIGMOD Workshop on Databases and Social Networks (SIGMOD DBSocial'12). 7-12.

TEACHING

Marquette University, Milwaukee, Wisconsin USA

COSC 4931/5931: Advanced Data Science

Spring 2018

COSC/MATH 3570: Introduction to Data Science

Spring 2017, 2018

COSC 4600/5600: Fundamentals of Artificial Intelligence

Fall 2017

COSC 1000: Introduction to Computer Science

Spring 2017, Fall 2016, 2017

Cornell University, Ithaca, New York USA

INFO 6940: Honest Statistics (w/ Malte Jung)	Spring 2015, 2016
INFO 3300: Data Driven Web Pages (w/ David Mimno and Lucja Kot)	Spring 2012, 2014
INFO 3200: New Media and Society (w/ Tarleton Gillespie)	Spring 2013
INFO 4302: Web Information Systems (w/ Carl Lagoze)	Fall 2011
INFO 1305: Computation and Culture in the Digital Age (w/ Daisy Fan)	Summer 2011

PRESS COVERAGE

- Algorithmic Ethics
 - TMJ4-NBC, November 2017
- Online Safety and Social Media (based on **C17**)
 - Gizmodo, April 2018
 - WFTV9-ABC, April 2018
 - Science Daily, April 2018
 - Daily Dot, April 2018
 - Times Now, April 2018
- Can't Quit Facebook? (based on **J4**)
 - Techlog360, October 2017
 - NY Daily News, December 2015
 - IB Times Australia, December 2015
 - IT News, December 2015
 - DNA India, December 2015
 - ABC WHAM Rochester, December 2015
 - Huffington Post, December 2015
 - Daily Mail UK, December 2015
- General:
 - Illuminating Intellect Podcast, April 2018
 - Marquette University Arts and Sciences Magazine, April 2018
 - Marquette Wire, August 2016

SERVICE

- **Program Committee/Associate Chair:**
 - **CSCW:** Technical Program'18
 - **CHI:** Late Breaking Work'17,'18
 - **ICTD:** Notes'17
 - **CHI Workshop:** Bridging a Bridge Workshop'18
 - **IC2S2:** Technical Program'17
- **Session Chair:**
 - **CHI 2017:** Theories and Methods
 - **GROUP 2016:** Mobile Computing Practices
- **Reviewer:** JASIST, CHI, CSCW, ICWSM, New Media & Society, PlosOne, ToCHI

- **Adviser:**
 - **PhD Chair:** Fayika Farhat Nova (CMPS), Md. Romael Hoque (CMPS)
 - **MS Chair:** Daniel Passe (CMPS), Chris Supinger (COMP)
- **Organizer:**
 - **Ethics of Big Data Symposium:** 2017, 2018
 - **CHI 2018:** Special Interest Group on Transparent Statistics Guidelines (with Matthew Kay, Steve Haroz, Pierre Dragicevic, and Chat Wacharamanatham)
 - **CHI 2017:** Workshop on Moving Transparent Statistics Forward at CHI 2017 (with Matthew Kay, Steve Haroz, Pierre Dragicevic, and Chat Wacharamanatham)
 - **CHI 2016:** Special Interest Group on Transparent Statistics (with Matthew Kay, Steve Haroz, and Pierre Dragicevic)
- **Academic Program Development:**
 - **Data Science Certificate:** Committee Member (Spring 2017)
 - **MS Health Care Data Analytics:** Committee Member (Spring 2017)
- **Faculty Search Committee:** Marquette University, Computer Science, (2017-2019)

HONORS AND
AWARDS

C15: Best of GROUP'18. Invited to ToSC special issue.

C9: Best of ICTD'16. Invited to ITID special issue.

Recognition for exceptional reviewing: CSCW (2016, 2017), CHI (2016, 2017)

Indian Statistical Institute: MS fellowship, 2008 - 2010.

Indian Statistical Institute: graduated with "**First Class with Distinction**" honors, 2010.

Indian Statistical Institute: ranked **first** in cohort and **best** MS thesis, 2010.

J1: Cited as an important study in potable water economics in the guidance notes of the World Bank Water and Sanitation Program, March 2009.

Indian Statistical Institute: ranked **first** in All India entrance examination, 2008.

Jadavpur University: graduated with "**First Class**" honors, 2008.

**Invited Talks and
Panels**

- University of Toronto, Department of Computer Science, April 2018
- Marquette University, James Holstein Research Colloquium, April 2018
- Indiana University-Purdue University Indianapolis, Informatics and Computing, March 2018.
- New York University, Center for Data Science, February 2018.
- Northwestern University, Media, Technology and Society, February 2018.
- University of Wisconsin, Milwaukee, Center for Information Technology Policy, January 2018.
- NSF Panel in Workshop on Trustworthy Algorithms, December 2017
- Colgate University, Department of Computer Science, October 2017.
- Nielsen Marketing Analytics, August 2017.
- Direct Supply, July 2017.
- Marquette University, Ethics of Big Data Symposium, March 2017
- Marquette University, College of Business, December 2016.
- University of San Francisco, Analytics program, February 2016.
- Human Computer Interaction Consortium (HCIC) (joint with Michael Muller), May 2015.
- Spatial Informatics Research Group, Indian Statistical Institute Bangalore, December 2012.