

Koustuv Saha, PhD

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My research spans the interdisciplinary areas of computational social science, social computing, and fairness, accountability, transparency, and ethics in AI (FATE). By complementing multimodal sensing data with social media, I adopt methods from machine learning, statistics, natural language, and causal inference analysis to examine wellbeing. A stream of my research focuses on wellbeing in situated contexts, such as college campuses and workplaces. I am interested in the in-practice utility and ecological validity of sensing technologies. Because these technologies can impact our lives in unintended ways, I critically reflect and interrogate the necessity, benefits, and harms of these technologies. This enables rethinking the responsible design, development, and deployment of these technologies (if at all).

Experience

- Aug 2023 – **University of Illinois at Urbana-Champaign, Urbana, Illinois, USA.**
Assistant Professor (Tenure-Track), Department of Computer Science, The Grainger College of Engineering.
- Jun 2023 – **University of Illinois at Urbana-Champaign, Urbana, Illinois, USA.**
Aug 2023 Assistant Professor (Adjunct), Department of Computer Science, The Grainger College of Engineering.
- Oct 2021 – **Microsoft Research, Montreal, Quebec, Canada.**
Feb 2023 Senior Researcher, Fairness, Accountability, Transparency, and Ethics in AI (FATE).
- Aug 2016 – **Georgia Institute of Technology, Atlanta, Georgia, USA.**
May 2021 Graduate Research Assistant, School of Interactive Computing, College of Computing.
- May 2020 – **Snap Research, Santa Monica, California, USA.**
Aug 2020 Research Intern, with Maarten Bos in the Computational Social Science team.
- May 2019 – **Microsoft Research, Bangalore, Karnataka, India.**
Aug 2019 Research Intern with Amit Sharma at MSR India.
- May 2018 – **Max Planck for Software Systems (MPI-SWS), Saarbrücken, Saarland, Germany.**
Jul 2018 Visiting Scholar with Krishna Gummadu in the Networked Systems Group.
- May 2017 – **Fred Hutchinson Cancer Research Center, Seattle, Washington, USA.**
Jul 2017 Graduate Research Intern with Naveen Ashish at Hutch Data Commonwealth.
- Dec 2012 – **Abzooba, Kolkata, West Bengal, India.**
Aug 2016 Senior Researcher, Abzooba X, NLP & Data Sciences R&D.
- Sep 2013 – **Praxis Business School, Kolkata, West Bengal, India.**
Jul 2014 Visiting Faculty Member
- Aug 2012 – **Infosys, Bangalore, Karnataka, India.**
Nov 2012 Junior Research Associate, Infosys Labs.
- May 2011 – **Siemens, Bangalore, Karnataka, India.**
Jul 2011 Research Intern with Sohini Sengupta at Siemens Corporate Technologies R&D

Education

- 2016–2021 **Doctor of Philosophy (Ph.D.), Computer Science.**
School of Interactive Computing, College of Computing, Georgia Institute of Technology **GPA: 4.0/4.0**
Doctoral Minor: Computational Social Science and International Affairs
Committee: Munmun De Choudhury (Chair & Advisor), Gregory D. Abowd, Thomas Plötz, Emre Kıcıman, Gloria Mark
Dissertation*: Computational and Causal Approaches on Social Media and Multimodal Sensing Data: Examining Wellbeing in Situated Contexts
* Awarded Outstanding Doctoral Dissertation Award by the College of Computing, Georgia Tech
- 2008–2012 **Bachelor of Technology (Hons.), Computer Science and Engineering.**
Computer Science and Engineering, Indian Institute of Technology Kharagpur
Guide: Sujoy Ghose | **B.Tech Project:** Ontology-based Semantic Information Retrieval

Publications

[Google Scholar](#) | [DBLP](#) | [ACM DL](#) | [ResearchGate](#)

Journal Articles

- J₂₉ 2023
PACM HCI:
CSCW Sefidgar, Y. S., Jörke, M., Suh, J., **Saha, K.**, Iqbal, S. T., Ramos, G., & Czerwinski, M., (2023). Improving Work-Nonwork Balance with Data-Driven Implementation Intention and Mental Contrasting. Proceedings of the ACM on Human-Computer Interaction.
- J₂₈ 2023
PACM HCI:
CSCW Kawakami, A., Chowdhary, S., Iqbal, S. T., Liao, Q. V., Olteanu, A., Suh, J., & **Saha, K.** (2023). Sensing Wellbeing in the Workplace, Why and For Whom? Envisioning Impacts with Organizational Stakeholders. Proceedings of the ACM on Human-Computer Interaction, [Link](#).
- J₂₇ 2023
PACM HCI:
CSCW Kim, M., **Saha, K.**, De Choudhury, M., & Choi, D. (2023). Supporters First: Understanding Online Social Support on Mental Health from a Supporter Perspective. In Proceedings of the ACM on Human-Computer Interaction, [PDF](#).
- J₂₆ 2023
PACM HCI:
CSCW Ehsan, U., **Saha, K.**, De Choudhury, M., & Riedl, M. O. (2023). Charting the Sociotechnical Gap in Explainable AI: A Framework to Address the Gap in XAI. In Proceedings of the ACM on Human-Computer Interaction, [Link](#).
- J₂₅ 2023
JMIR Form.
Res. Cascalheira, C. J., Flinn, R. E., Zhao, Y., Klooster, D., Laparade, D., Hamdi, S. M., Scheer, J. R., Gonzalez, A., Lund, E. M., Gomez, I. N., **Saha, K.**, & De Choudhury, M. (2023). Modeling gender dysphoria with machine learning and natural language processing: Implications for technology-delivered interventions. JMIR Formative Research.
- J₂₄ 2023
TVA O'Hanlon R*, Altice FL, Lee R, LaViolette J, Mark, G, Papakyriakopoulos, O, **Saha K**, De Choudhury M, & Kumar N (2023). Misogynistic Extremism: A Scoping Review. Trauma, Violence, & Abuse (Forthcoming).
- J₂₃ 2022
Nature Sci Rep **Saha, K.**, Yousuf, A., Boyd, R. L., Pennebaker, J. W., & De Choudhury, M. (2022). Social Media Discussions Predict Mental Health Consultations on College Campuses. Nature Scientific Reports, 12:123, [Link](#).
- J₂₂ 2022
ACM Health Bin Morshed, M., Kulkarni, S. S., **Saha, K.**, Li, R., Roper, L. G., Nachman, L., Lu, H., de Barbaro, K., De Choudhury, M., Ploetz, T., & Abowd, G. D. (2022). Food, Mood, Context: Examining College Students' Eating Context and Mental Well-being. ACM Transactions on Computing for Healthcare, [Link](#).
- J₂₁ 2022
PACM HCI:
CSCW Zhou, J., **Saha, K.**, López, I., Deeter, C. R., Yoo, D. Y., De Choudhury, M., & Arriaga, R. (2022). Veteran Critical Theory as a Lens to Understand Veterans' Needs and Social Support on Social Media. In Proceedings of the ACM on Human-Computer Interaction, 6, (CSCW1), 133, [PDF](#).
- J₂₀ 2022
BMC
Public Health Kumar, N., Corpus, I., Hans, M., Harle, N., Yang, N., McDonald, C., Sakai, S. N., Janmohamed, K. A., Chen, K., Altice, F. L., Tang, W., Schwartz, J. L., Jones-Jang, S. M., **Saha, K.**, Memon, S. A., Bauch, C. T., De Choudhury, M., Papakyriakopoulos, O., Tucker, J. D., Goyal, A., Tyagi, A., Khoshnood, K., Omer, S. (2022). COVID-19 vaccine perceptions in the initial phases of US vaccine roll-out: an observational study on Reddit. BMC Public Health (2022), 22:446, [Link](#).
- J₁₉ 2021
JMIR MH **Saha, K.**, Torous, J., Kiciman, E., & De Choudhury, M. (2021). Understanding Side Effects of Antidepressants: Large-scale Longitudinal Study on Social Media Data. JMIR Mental Health; 8 (3), [Link](#).
- J₁₈ 2021
PACM IMWUT **Saha, K.***, Grover, T.*, Mattingly, S. M., Das Swain, V., Gupta, P., Martinez, G. J., Robles-Granda, P., Mark, G., Striegel, A., & De Choudhury, M. (2020). Person-Centered Predictions of Psychological Constructs with Social Media Contextualized by Multimodal Sensing. In Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies, 5, (1), 32, (* co-primary authors), Presented at UbiComp 2021, [PDF](#).
- J₁₇ 2021
PACM HCI:
CSCW **Saha, K.**, Yousuf, A., Hickman, L., Gupta, P., Tay, L., & De Choudhury, M. (2021). A Social Media Study on Demographic Differences in Perceived Job Satisfaction. In Proceedings of the ACM on Human-Computer Interaction, 5, (CSCW1), 167, [PDF](#).
- J₁₆ 2021
Nature HSSC ElSherief, M., **Saha, K.**, Gupta, P., Mishra, S., Seybolt, J., Xie, J., O'Toole, M., Burd-Sharps, S., & De Choudhury, M. (2021). Impacts of School Drills on the Psychological Well-being of American K-12 School Communities: A Social Media Study. Nature Humanities and Social Sciences Communications, [Link](#).
- J₁₅ 2021
PACM HCI:
CSCW Gong, C., **Saha, K.**, & Chancellor, S. (2021). "The Smartest Decision for My Future": Social Media Reveals Challenges and Stress During Post-College Life Transition. In Proceedings of the ACM on Human-Computer Interaction, 5, (CSCW2), 298, [PDF](#).
- J₁₄ 2021
JMIR mHealth
& uHealth Martinez, G.J., Mattingly, S. M., Robles-Granda, P., **Saha, K.**, Sirigiri, A., Young, J., Chawla, N. V., De Choudhury, M., D'Mello, S. K., Mark, G., & Striegel, A. (2021). Predicting Participant Compliance with Fitness Tracker Wearing and EMA Protocols in Information Workers: An Observational Study. Journal of Medical Internet Research mHealth and uHealth; 9(11), [Link](#).
- J₁₃ 2021
IEEE Pervasive
Computing Mirjafari, S., Nepal, S. K., Bagherinezhad, H., Martinez, G. J., **Saha, K.**, Obuchi, M., Audia, P., Chawla, N. V., Dey, A. K., Striegel, A., & Campbell, A. T. (2021). Predicting Job Performance Using Mobile Sensing. IEEE Pervasive Computing, [Link](#).

- J₁₂ 2021 IEEE Comp. Intel. Magazine Robles-Granda, P., Lin, S., Wu, X., Campbell, A. T., De Choudhury, M., Dey, A.K., D'Mello, S. K., Gregg, J. M., Grover, T., Mark, G., Martinez, G. J., Masaba, K., Mattingly, S. M., Mirjafari, S., Moskal, E., Nies, K., **Saha, K.**, Striegel, A., & Chawla, N. V. (2021). Jointly Modeling and Predicting Job Performance, Personality, and Well-Being. In IEEE Computational Intelligence Magazine, 16 (2), [Link](#).
- J₁₁ 2020 JMIR **Saha, K.**, Torous, J., Caine, E. D., & De Choudhury, M. (2020). Psychosocial Effects of the COVID-19 Pandemic: Large-scale Quasi-Experimental Study on Social Media. Journal of Medical Internet Research (JMIR), 22(11), e22600, [Link](#).
- J₁₀ 2020 JMIR mHealth & uHealth Bin Morshed, M., Kulkarni, S. S., Li, R., **Saha, K.**, Nachman, L., Lu, H., Galante, L., Srivastava, S., Mirabella, L., De Choudhury, M., de Barbaro, K., Ploetz, T., & Abowd, G. D. (2020). A Real-Time Eating Detection System for Capturing Eating Moments and Triggering EMAs to Collect Further Context. Journal of Medical Internet Research mHealth and uHealth.
- J₉ 2019 PACM HCI: CSCW **Saha, K.**, Reddy, M. D., Mattingly, S. M., Moskal, E., Sirigiri, A., & De Choudhury, M., (2019). LibRA: On LinkedIn based Role Ambiguity and Its Relationship with Wellbeing and Job Performance. In Proceedings of the ACM on Human-Computer Interaction (PACM HCI), 3, (CSCW), 137., Presented at CSCW 2019, [PDF](#).
- J₈ 2019 PACM HCI: CSCW **Saha, K.**, Kim, S.C., Reddy, M. D., Carter, A.J., Sharma, E., Haimson, O.L., & De Choudhury M., (2019). The Language of LGBTQ+ Minority Stress Experiences on Social Media. In Proceedings of the ACM on Human-Computer Interaction (PACM HCI), 3, (CSCW), 89., Presented at CSCW 2019, [PDF](#).
- J₇ 2019 PACM IMWUT Das Swain, V., **Saha, K.**, Rajvanshy, H., Sirigiri, A., Gregg, J.M., Lin, S., Martinez, G.J, Mattingly, S. M., Mirjafari, S., Mulukutla, R., Nies, K.A., Reddy, M. D., Robles-Granda, P., Campbell, A.T., Chawla, N.V., D'Mello, S.K., Dey, A. K., Jiang, K., Liu, Q., Mark, G., Moskal, E., Striegel, A., Tay, L., Abowd, G. D., & De Choudhury, M (2019). A Multisensor Person-Centered Approach to Understand the Role of Daily Activities in Job Performance with Organizational Personas. In Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies, 3,(4),130., (Non *first four* authors are listed alphabetically), [PDF](#).
- J₆ 2019 PACM IMWUT Bin Morshed, M., **Saha, K.**, Li, R., D'Mello, S.K., De Choudhury, M., Abowd, G. D., & Ploetz, T., (2019). Prediction of Mood Instability with Passive Sensing. In Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies, 3,(3),75., [PDF](#).
- J₅ 2019 TBM **Saha, K.***, Torous, J.*, Ernala, S.K., Rizuto, C., Stafford, A., & De Choudhury, M. (2019). A Computational Study of Mental Health Awareness Campaigns on Social Media. Translational Behavioral Medicine, 9(6), (* co-primary authors), [Link](#).
- J₄ 2019 PACM IMWUT Mirjafari, S., Masaba, K., Grover, T., Wang, W., Audia, P., Campbell, A.T., Chawla, N.V., Das Swain, V., De Choudhury, M., D'Mello, S.K., Dey, A.K., Gao, G., Gregg, J.M., Grover, T., Jagannath, K., Jiang, K., Lin, S., Liu, Q., Mark, G., Martinez, G.J, Mattingly, S. M., Moskal, E., Mulukutla, R., Nepal, S., Nies, K.A., Reddy, M. D., Robles-Granda, P., **Saha, K.**, Sirigiri, A., & Striegel, A., (2019). Differentiating Higher and Lower Job Performers in the Workplace using Mobile Sensing. In Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies, 3, (2), 37, (Non *first four* authors are listed alphabetically), [PDF](#).
- J₃ 2018 PACM HCI: CSCW **Saha, K.**, & De Choudhury, M. (2017). Modeling Stress with Social Media Around Incidents of Gun Violence on College Campuses. In Proceedings of the ACM on Human-Computer Interaction, 1, (CSCW), 92., Presented at CSCW 2018, [PDF](#).
- J₂ 2017 PACM IMWUT **Saha, K.**, Chan, L., de Barbaro, K., Abowd, G. D., & De Choudhury, M. (2017). Inferring Mood Instability on Social Media by Leveraging Ecological Momentary Assessments. Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies, 1, (3), 95., Presented at UbiComp 2017, [PDF](#).
- J₁ 2017 JMIR **Saha, K.**, Weber, I., Birnbaum, M.L., & De Choudhury, M. (2017). Characterizing Awareness of Schizophrenia Among Facebook Users by Leveraging Facebook Advertisement Estimates. Journal of Medical Internet Research, 19(5), Presented at Mental Health Symposium, CHI 2017, [Link](#).

Refereed Conference Papers

- C₂₉ 2023 ACM FAccT Chowdhary, S., Kawakami, A., Gray, M. L., Suh, J., Olteanu, A., & **Saha, K.** (2023). Can Workers Meaningfully Consent to Workplace Wellbeing Technologies? Proceedings of the ACM Conference on Fairness, Accountability, and Transparency (ACM FAccT) 2023 (Forthcoming), [Link](#).
- C₂₈ 2023 IC2S2 Yuan, Y., **Saha, K.**, Keller, B., Isometsä, E., Aledavood, T. (2023). Does Papageno Effect Occur on Social Media In 9th International Conference on Computational Social Science (IC2S2).
- C₂₇ 2023 ACM CHIWORK **Saha, K.**, & Iqbal, S. T., (2023). Focus Time: Effectiveness of Computer Assisted Protected Time for Wellbeing and Work Engagement of Information Workers. In 2023 CHIWORK Symposium on Human-Computer Interaction for Work, (Forthcoming).
- C₂₆ 2023 ACM TheWebConf Yuan, Y., **Saha, K.**, Keller, B., Isometsä, E., Aledavood, T. (2023). Mental Health Coping Stories on Social Media: A Causal-Inference Study of Papageno Effect. In Proceedings of the ACM Web Conference 2023 (WWW) (Forthcoming), [PDF](#).
- C₂₅ 2023 ACM CHI Das Swain, V., Hernandez, J., Houck, B., **Saha, K.**, Suh, J., Chaudhry, A., Cho, T., Guo, W., Iqbal, S. T., Czerwinski, M. (2023). Focused Time Saves Nine: Evaluating Computer-Assisted Protected Time for Hybrid Information Work In Proceedings of the CHI Conference on Human Factors in Computing Systems, [PDF](#).

- C₂₄ 2023 **Saha, K.**, & Iqbal, S. T., (2023). Focus Time for Wellbeing and Work Engagement of Information Workers. In Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems Extended Abstracts, [PDF](#).
ACM CHI LBW
- C₂₃ 2023 Sefidgar, Y. S., Jörke, M., Suh, J., **Saha, K.**, Iqbal, S. T., Ramos, G., Czerwinski, M. (2023). Lessons Learned for Data-Driven Implementation Intentions with Mental Contrasting In Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems Extended Abstracts, [PDF](#).
ACM CHI Case Study
- C₂₂ 2023 Chen, K., Babaeianjelodar, M., Shi, Y., Janmohamed, K., Sarkar, R., Weber, I., Davidson, T., De Choudhury, M., Huang, J., Yadav, S., Khudabuksh, A., Bauch, C., Nakov, P., Papakyriakopoulos, O., **Saha, K.**, Khoshnood, K., & Kumar, N. (2023). Partisan US News Media Representations of Syrian Refugees. Proceedings of the 16th International AAAI Conference on Web and Social Media (ICWSM) (Forthcoming).
ICWSM
- C₂₁ 2022 Cascalheira, C. J., Hamdi, S. M., Scheer, J. R., **Saha, K.**, Boubrahimi, S. F., & De Choudhury, M. (2022). Classifying minority stress disclosure on social media with bidirectional long short-term memory. Proceedings of the 15th International AAAI Conference on Web and Social Media (ICWSM), [PDF](#).
ICWSM
- C₂₀ 2022 Chen, K., Feng, A., Aanegola, R., **Saha, K.**, Wong, A., Schwitzky, Z., Lee, R., O'Hanlon, R., De Choudhury, M., Altice, F. L., Khoshnood, K., & Kumar, N. (2022). Categorizing Memes about the Ukraine Conflict. The 11th International Conference on Computational Data and Social Networks (CSoNet).
CSoNet
- C₁₉ 2021 **Saha, K.**, Seybolt, J., Mattingly, S. M., Aledavood, T., Konjeti, C., Martinez, G. J., Grover, T., Mark, G., & De Choudhury, M. (2021). What Life Events are Disclosed on Social Media, How, When, and By Whom? In Proceedings of the CHI Conference on Human Factors in Computing Systems, [PDF](#).
ACM CHI
- C₁₈ 2021 **Saha, K.**, Liu, Y., Vincent, N., Chowdhury, F. A., Neves, L., Shah, N., & Bos, M. W. (2021). AdverTiming Matters: Examining User Ad Consumption for Effective Ad Reallocations on Social Media. In Proceedings of the CHI Conference on Human Factors in Computing Systems, [PDF](#).
ACM CHI
- C₁₇ 2021 Wang, Q., **Saha, K.**, Gregori, E., Joyner, D., & Goel, A. K. (2021). Towards Mutual Theory of Mind in Human-AI Interaction: How Language Reflects What Students Perceive About a Virtual Teaching Assistant. In Proceedings of the CHI Conference on Human Factors in Computing Systems, [PDF](#).
ACM CHI
- C₁₆ 2021 Chowdhury, F. A., Liu, Y., **Saha, K.**, Vincent, N., Neves, L., Shah, N., & Bos, M. W. (2021). CEAM: The Effectiveness of Cyclic and Ephemeral Attention Models of User Behavior on Social Platforms. In Proceedings of the 15th International AAAI Conference on Web and Social Media, [PDF](#).
AAAI ICWSM
- C₁₅ 2021 Chowdhury, F. A., Saha, D., Hasan, M. R., **Saha, K.**, & Mueen, A. (2021). Examining Factors Associated with Twitter Account Suspension Following the 2020 U.S. Presidential Election. Proceedings of the 2021 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining, [PDF](#).
ASONAM
- C₁₄ 2020 Das Swain, V.*, **Saha, K.***, Abowd, G. D., & De Choudhury, M. (2020). Social Media and Ubiquitous Technologies for Assessing Remote Worker Wellbeing and Productivity in a Post-Pandemic World. Proceedings of the 2020 IEEE Second International Conference on Cognitive Machine Intelligence (CogMI), (* co-primary authors).
IEEE CogMI
- C₁₃ 2020 **Saha, K.**, & Sharma, A. (2020). Causal Factors of Effective Psychosocial Outcomes in Online Mental Health Communities. Proceedings of the 14th International AAAI Conference on Web and Social Media., Presented at ICWSM 2020, [PDF](#).
AAAI ICWSM
- C₁₂ 2020 Das Swain, V.*, **Saha, K.***, Reddy, M. D., Rajvanshy, H., Abowd, G. D., & De Choudhury, M. (2020). Modeling Organizational Culture with Workplace Experiences Shared on Glassdoor. Proceedings of the CHI Conference on Human Factors in Computing Systems, (* co-primary authors), Video Presented for CHI 2020, [PDF](#).
ACM CHI
- C₁₁ 2020 Bin Morshed, M.*, **Saha, K.***, De Choudhury, M., Abowd, G. D., & Ploetz, T., (2020). Modeling Self-Esteem with Passive Sensing. In Proceedings of the 14th EAI International Conference on Pervasive Computing Technologies for Healthcare, (* co-primary authors), Video Presented for PervasiveHealth 2020, [PDF](#).
EAI Pervasive Health
- C₁₀ 2020 **Saha, K.**, Ernala, S. K., Dutta, S., Sharma, E., & De Choudhury, M. (2020). Understanding Moderation in Online Mental Health Communities. In 22nd International Conference on Human-Computer Interaction, Springer LNCS, Presented at HCI 2020, [PDF](#).
HCII
- C₉ 2019 **Saha, K.**, Sugar, B., Torous, J., Abrahao, B., Kiciman, E., & De Choudhury, M. (2019). A Social Media Study on The Effects of Psychiatric Medication Use. In Proceedings of the 13th International AAAI Conference on Web and Social Media., Presented at ICWSM 2019, [Outstanding Study Design Paper](#), [PDF](#).
AAAI ICWSM
- C₈ 2019 **Saha, K.**, Chandrasekharan, E., & De Choudhury, M. (2019). Prevalence and Psychological Effects of Hateful Speech in Online College Communities. In Proceedings of the 11th ACM Conference on Web Science, Presented at WebSci 2019, [PDF](#).
ACM WebSci
- C₇ 2019 **Saha, K.**, Reddy, M. D., Das Swain, V., Gregg, J.M., Grover, T., Lin, S., Martinez, G.J., Mattingly, S. M., Mirjafari, S., Mulukutla, R., Nies, K., Robles-Granda, P., Sirigiri, A., Yoo, D.W., Audia, P., Campbell, A.T., Chawla, N.V., D'Mello, S.K., Dey, A.K., Jiang, K., Liu, Q., Mark, G., Moskal, E., Striegel, A., & De Choudhury, M. (2019). Imputing Missing Social Media Data Streams in Multisensor Studies of Human Behavior. In Proceedings of the 8th International Conference on Affective Computing and Intelligent Interaction (ACII), (Non *first three* authors are listed alphabetically), Presented at ACII 2019, [PDF](#).
ACII

- C₆ 2019 ACM CHI Case Study **Saha, K.**, Bayraktaraglu, A.E., Campbell, A.T., Chawla, N.V., De Choudhury, M., D'Mello, S.K., Dey, A.K., Gao, G., Gregg, J.M., Jagannath, K., Mark, G., Martinez, G.J., Mattingly, S. M., Moskal, E., Sirigiri, A., Striegel, A., & Yoo, D. W., (2019). Social Media as a Passive Sensor in Longitudinal Studies of Human Behavior and Wellbeing. In Proceedings of the 2019 CHI Conference on Human Factors in Computing Systems Extended Abstracts, (Non *first* authors are listed alphabetically), Presented at CHI 2019, [PDF](#).
- C₅ 2019 ACM CHI Case Study Mattingly, S. M., Gregg, J.M., Audia, P., Bayraktaraglu, A.E., Campbell, A. T., Chawla, N.V., Das Swain, V., De Choudhury, M., D'Mello, S.K., Dey, A.K., Gao, G., Jagannath, K., Jiang, K., Lin, S., Liu, Q., Mark, G., Martinez, G.J., Masaba, K., Mirjafari, S., Moskal, E., Mulukutla, R., Nies, K., Reddy, M. D., Robles-Granda, P., **Saha, K.**, Sirigiri, A., & Striegel, A., (2019). The Tesseract Project: Large-Scale, Longitudinal, *In Situ*, Multimodal Sensing of Information Workers. In Proceedings of the 2019 CHI Conference on Human Factors in Computing Systems Extended Abstracts, (Non *first two* authors are listed alphabetically), [PDF](#).
- C₄ 2019 ACM FAT* Ribeiro, F. N.*, **Saha, K.***, Babaei, M., Henrique, L., Messias, J., Benevenuto, F., Goga, O., Gummadi, K. P., & Redmiles, E. M. (2019). On Microtargeting Socially Divisive Ads: A Case Study of Russia-Linked Ad Campaigns on Facebook. In Proceedings of the 2nd ACM Conference on Fairness, Accountability, and Transparency (FAT*), (* co-primary authors), Presented at FAT* 2019, [PDF](#).
- C₃ 2019 SocInfo **Saha, K.**, Reddy, M. D., & De Choudhury M., (2019). JobLex: A Lexico-Semantic Knowledgebase of Occupational Information Descriptors. 11th International Conference on Social Informatics (SocInfo), [PDF](#).
- C₂ 2018 AAAI ICWSM **Saha, K.**, Weber, I, & De Choudhury, M. (2018). A Social Media Based Examination of the Effects of Counseling Recommendations After Student Deaths on College Campuses. In Proceedings of the 12th International AAAI Conference on Web and Social Media., Presented at ICWSM 2018, [PDF](#).
- C₁ 2017 ACM CSS Sharma, E.*, **Saha, K.***, Ernala, S.K.*, Ghoshal, S.*, & De Choudhury, M. (2017). Analyzing Ideological Discourse on Social Media: A Case Study on the Abortion Discourse. Proceedings of the 2017 International Conference of The Computational Social Science Society of the Americas (CSS), (* co-primary authors), [PDF](#).

Refereed Workshop Articles and Presentations & Invited Articles and Book Chapters

- B₁ 2023 Book Chapter **Saha, K.** & De Choudhury, M. (2023). Examining Well-Being in Situated Contexts with Computational Modeling of Social Media Data (Forthcoming). Mobile Sensing in Psychology: Methods and Applications, Guilford Press.
- E₁ 2023 Editorial **Saha, K.**, Jaidka, K., Kim, J., & Suh, J. (2023). Digital Mental Health and Wellbeing under Crisis. Topic Proposal at Frontiers in Digital Health.
- W₁₄ 2023 mWell, ACII Haresamudram, H., Suh, J., Hernandez, J., Butler, J., Chaudhry, A., Yang, L., **Saha, K.**, & Czerwinski, M. (2023). Investigating Self-supervised Learning for Predicting Stress and Stressors from Passive Sensing. Affective Computing for Mental Wellbeing (mWell), collocated with ACII 2023.
- W₁₃ 2023 mWell, ACII Suh, J., Hernandez, J., **Saha, K.**, Dixon, K., Bin Morshed, M., Howe, E., Kawakami, A., & Czerwinski, M. (2023). Towards Successful Deployment of Wellbeing Sensing Technologies: Identifying Misalignments across Contextual Boundaries. Affective Computing for Mental Wellbeing (mWell), collocated with ACII 2023.
- W₁₂ 2023 PhoMemes, AAAI ICWSM Nainani, Y., Khoshnood, K., Feng, A., Siddique, M., Broekaert, C., Wong, A., **Saha, K.**, Lee, R. K., Schwitzky, Z., Cheung, L. Y., Altice, F. L., & Kumar, N. (2023). Categorizing Memes about Abortion. Second Workshop on Images in Online Political Communication, collocated with ICWSM 2023.
- W₁₁ 2022 MSR Montreal Kawakami, A., Liao, Q. V., Olteanu, A., & **Saha, K.** (2022). Multi-stakeholder Attitudes Towards Wellbeing Sensing Technologies in the Workplace: Developing a Taxonomy of Harms. MSR Montreal Poster Session.
- W₁₁ 2022 SCP **Saha, K.**, Liu, Y., Vincent, N., Chowdhury, F. A., Neves, L., Shah, N., & Bos, M. W. (2022). AdverTiming Matters. Society for Consumer Psychology, [PDF](#).
- M₁ 2021 XRDS **Saha, K.** and De Choudhury, M. (2021). Assessing the Mental Health of College Students by Leveraging Social Media Data. ACM XRDS, [PDF](#).
- DC 2020 CSCW DC **Saha, K.** (2020). Computational and Causal Examinations of Wellbeing in Situated Contexts by Leveraging Social Media and Multimodal Data. In CSCW 2020 Doctoral Consortium, [PDF](#).
- W₁₀ 2020 New Future of Work Das Swain, V.*, **Saha, K.***, Abowd, G. D., & De Choudhury, M. (2020). Social and Ubiquitous Technologies for Future of Worker Wellbeing. In Microsoft Research Symposium on the New Future of Work, (* co-primary authors), [In Highlighted Talks](#), [PDF](#).
- W₉ 2020 WristSense, IEEE PerCom **Saha, K.**, Mattingly, S. M.*, Young, J., Faust, L., Dey, A.K., Campbell, A.T., De Choudhury, M., Mirjafari, S., Nepal, S., Robles-Granda, P., **Saha, K.**, & Striegel, A. (2019). Improved Sleep Detection Through the Fusion of Phone Agent and Wearable Data Streams. In WristSense 2020: Workshop on Sensing Systems and Applications Using Wrist Worn Smart Devices, colocated with IEEE PerCom, (* co-primary authors), [Best Paper Honorable Mention](#), [PDF](#).
- W₈ 2020 APPAM O'Toole, M. J., Burd-Sharps, S., De Choudhury, M., ElSherif, M., **Saha, K.**, Gupta, P., Mishra, S., & Xie, J. (2020, November). Assessing the Impacts of Active Shooter Drills in Schools with Big Data. In 2020 APPAM Fall Research Conference. APPAM.

- W₇ 2019 **Saha, K.**, Das Swain, V., Yoo, D. W., Abowd, G. D., & De Choudhury, M. (2019). Tesseract: Multimodal Sensing To Model Individual Differences and Job Performance at Workplaces. In ITU Kaleidoscope Demos 2019.
- W₆ 2019 **Saha, K.***, Moshed, M. B.*, Moon, S., O'Connor, J., Das, S., Abowd, G. D., Ploetz, T., & De Choudhury, M. (2019). Understanding Health-Oriented Privacy Perceptions Regarding Ubiquitous Technology Use. In ITU Kaleidoscope Demos 2019, (* co-primary authors).
- W₅ 2019 **Saha, K.**, Chandrasekharan, E., & De Choudhury, M. (2019). Hateful Speech in Online College Communities. In Managing Norms, ICWSM and Designing for Norms in Online Communities Workshop, colocated with ICWSM 2019, [PDF](#).
- W₄ 2019 **Saha, K.**, Hickman, L., De Choudhury, M., & Tay, L. (2019). Automated Tracking of Components of Job Satisfaction via Text Mining of Twitter Data. In Machine Learning Symposium, colocated with Annual Society for Industrial and Organizational Psychology Conference (SIOP 2019), [PDF](#).
- W₃ 2019 **Saha, K.**, Lin, S., Mattingly, S. M., Han, X., Audia, P., Campbell, A. T., Das Swain, V., De Choudhury, M., D'Mello, S.K., Dey, A.K., Gao, G., Gregg, J.M., Jagannath, K., Jiang, K., Liu, Q., Mark, G., Martinez, G.J., Masaba, K., Moskal, E., Mulukutla, R., Nies, K.A., Reddy, M. D., Robles-Granda, P., Sirigiri, A., & Striegel, A., Chawla, N.V., (2019). Sensing Personality to Predict Job Performance. In the Future of Work Workshop, colocated with ACM CHI 2019, [PDF](#).
- W₂ 2018 **Saha, K.**, Ernala, S., Rizuto, C., Torous, J., & De Choudhury, M. (2018). A Study of Mental Health Awareness Campaigns on Social Media. In Social Media and Health (SMHealth) Workshop, colocated with ICWSM 2018.
- W₁ 2017 **Saha, K.**, Weber, I., Birnbaum, M.L., and De Choudhury, M. (2017). Characterizing Awareness of Schizophrenia Among Facebook Users by Leveraging Facebook Advertisement Estimates. In Mental Health Symposium, colocated with CHI 2017.

Dissertation

- 2021 **Saha, K.** (2021). Computational and Causal Approaches on Social Media and Multimodal Sensing Data: Examining Wellbeing in Situated Contexts. Doctoral dissertation, Georgia Institute of Technology, [Link](#).

Patents

- 2020 Bos, M. W., Liu, Y., **Saha, K.**, Shah, N., Neves, L., Vincent, N., & Chowdhury, F. A., Timing Advertising to User Receptivity (1), *US Patent Filed, Dec'20*.
- 2020 Bos, M. W., Liu, Y., **Saha, K.**, Shah, N., Neves, L., Vincent, N., & Chowdhury, F. A., Timing Advertising to User Receptivity (2), *US Patent Filed, Dec'20*.
- 2015 Patel, L., **Saha, K.**, Das, S., & Biswas, A., A System and Method for Sentiment Analysis of Text., *US Provisional Patent Filed, Aug'14, US Patent Filed, Aug'15*.
- 2015 Patel, L., **Saha, K.**, Das, S., & Biswas, A., A System and Method for scalable and continuous learning and annotation of data., *US Provisional Patent Filed, Mar'15*.
- 2014 Bose, A., **Saha, K.**, Das, S., & Biswas, N., A System and Method for Predicting Compliance Issues., *US Provisional Patent Filed, Feb'14*.

Accepted Proposals and Grants

- 2022 On Supporting Workers Through Data-Driven Insights, *Koustuv Saha, Jina Suh, Shamsi T. Iqbal, Javier Hernandez, Judith Amores, Gonzalo Ramos, Kate Nowak, Mary Czerwinski*, Joint E&D and MSR (JEM).
- 2022 Investigating Interaction-Based Harms in AI Systems, *AJung Moon, Shalaleh Rismani, Q. Vera Liao, Alexandra Olteanu, Koustuv Saha, and Su Lin Blodgett*, MSR & Mila Collaboration, Montreal.
- 2022 Information Pathways on Telegram and How They Shape Perceptions Around National Issues, *Edson C. Tandoc, Jr., Roy Ka-Wei Lee, Navin Kumar, and Koustuv Saha*, Temasek Laboratories@NTU, Singapore, \$547,033.
- 2022 Leveraging Artificial Intelligence and Social Media to Predict Stress Hormone Levels, Probable PTSD, and Hazardous Drinking Among Sexual Minority Women: A Pilot Study, *Cory J. Cascalheira, Virinca Jaipuriyar, Aubriana A. Schwarz, Jillian R. Scheer, Shah Muhammad Hamdi, Koustuv Saha, and Munmun De Choudhury*, Bioscience TRAIN Mini-Grant NMSU RISE5, \$1,500.

Awards, Fellowships, & Highlights

- 2022 Recipient of Georgia Tech College of Computing Outstanding Dissertation Award (USD \$500).

- 2020 Recipient of the Snap Research Fellowship Award (USD \$10,000).
- 2020 Recipient of the GVU Foley Scholarship Award (USD \$5,000).
- 2020 Selected for CSCW 2020 Doctoral Consortium (Full Funding).
- 2020 Best Paper Honorable Mention at WristSense 2020 [W₈].
- 2019 Outstanding Study Design Paper Award at ICWSM 2019 [C₉].
- 2019 Finalist in Symantec Graduate Research Fellowship Award.
- 2014 Won Data Science Hackathon on Compliance Risk Prediction, organized by a U.S. Retail Giant.
- 2008 Qualified in Top 0.5% at IITJEE 2008 and Top 0.3% at AIEEE 2008.
- 2006 Awarded National Talent Search Examination (NTSE) Scholarship by NCERT, Govt. of India.

Talks, Panels, and Demos

- 2023 Measuring Wellbeing in Situated Contexts with Social Media and Multimodal Sensing: Promises and Perils.
 Indian Institute of Technology (IIT) Kharagpur
 Tata Consultancy Services (TCS) Research
 University of Illinois Urbana-Champaign
 University of Utah
 Northeastern University
 University of Massachusetts, Amherst
 University of South Carolina
 University of Iowa
 Rutgers University
 Microsoft Research, Redmond
 Microsoft Research, Montreal
- 2022 Examining Wellbeing with Social Media and Multimodal Sensing: Potentials and Next Steps, *Aalto University*.
- 2022 Co-organizer of Workshop, *Rethinking Technology for Mental Health and Wellbeing*, Microsoft Research Summit.
- 2022 Panelist, *Mental Health and Social Media*, 8th International Workshop on Mining Actionable Insights from Social Networks, TheWebConf 2022.
- 2022 Speaker, *AI and worker wellbeing: A responsible AI perspective*, CHI Work: Symposium on Human-Computer Interaction for Work, [Link](#).
- 2021 Measuring Wellbeing in Situated Contexts with Social Media and Multimodal Sensing Data: Potentials and Next Steps, *MSR Montreal*.
- 2021 Computational and Causal Approaches on Social Media and Multimodal Sensing Data: Examining Wellbeing in Situated Contexts.
 Microsoft Research, Redmond (Human Understanding and Empathy)
 National University of Singapore
 Sabarmati Young Researcher Seminar, IIT Gandhinagar
 University of South Carolina
 University of Illinois, Chicago
 Temple University
 Microsoft Research, India
 Adobe Research
 Drexel University
 Georgia State University
 University of Pittsburgh
 GVU Brown Bag
 Georgia Tech, Ubicomp
 Microsoft Applied Research Invited Talk Series: Rising Stars
 Microsoft Research, Montreal
- 2021 Panelist, *UGCL Affinity Group Social at EACL*.
- 2020 Social Media Reveals Psychosocial Effects of the COVID-19 Pandemic, *GVU Research Showcase*.
- 2020 AdverTiming Matters: Examining User Ad Consumption for Effective Ad Reallocation on Social Media, *Snap Research*.

- 2020 Computational and Causal Approaches on Social Media and Multimodal Data For Wellbeing, *TCS Innovation Research Labs*.
- 2019 A Social Media Study on The Effects of Psychiatric Medication Use, *Microsoft Research*.
- 2019 Tesseract: Measuring Role Ambiguity Using LinkedIn Data, *GVU Research Showcase*.
- 2019 Tesseract: Modeling Organizational Culture Using Glassdoor Data, *GVU Research Showcase*.
- 2019 A Social Media Study on The Effects of Psychiatric Medication Use, *GVU Research Showcase*.
- 2018 Tesseract: Multimodal Sensing To Model Individual Differences and Job Performance at Workplaces, *GVU Research Showcase*.
- 2017 Examining Colorectal Cancer Risk using SNPs, *Fred Hutch*.
- 2017 Using Social Media to Model Stress in College Campuses Around Violent Incidents, *GVU Research Showcase*.
- 2016 CampusLife: Understanding Student Mental Wellbeing with Multimodal Sensing, *GVU Research Showcase*.
- 2016 Using Facebook Ad Audience Estimates to Study Psychosis Awareness in the US, *GVU Research Showcase*.
- 2016 An Hybrid Approach for Knowledgebase Buildup and Lookup, *Georgia Tech, COC*.

Media Coverage ---

- 2022 Russian Election Interference Effectiveness, *Data Skeptic Podcast*, [Link](#).
- 2022 Understanding Stress Levels of Campus Shootings with ML, *Sustainable AI Podcast*, [Link](#).
- 2022 Are active shooter drills worth it?, *Vox*, [Link](#).
- 2022 Campaign Urges Users to Post Pictures of Psychiatric Medications, *Psychiatric News*, [Link](#).
- 2022 Uncertainty In The Workplace: Navigating LinkedIn Role Ambiguity, *Ethical Digital*, [Link](#).
- 2021 Wearable tech confirms wear-and-tear of work commute , *Science Daily*, [Link](#).
- 2020 Kovid-19 sosyal medyanın 'psikolojisini' etkiledi, *Sabah*, [Link](#).
- 2020 Is Everybody Doing ... OK? Let's Ask Social Media: Researchers are looking at online behavior to gauge public mental health. The results aren't pretty., *The New York Times*, [Link](#).
- 2020 High levels of pandemic-induced anxiety, depression observed in social media posts., *CBC Radio*, [Link](#).
- 2020 Active shooter drills are meant to prepare students. But research finds 'severe' side effects., *NBC News*, [Link](#).
- 2020 Georgia Tech researchers find active shooter drills in schools may increase anxiety, depression for several months., *11Alive*, [Link](#).
- 2020 Study links active shooter drills in schools to increased depression and anxiety., *The Hill*, [Link](#).
- 2020 Study finds active shooter drills have negative impacts on students., *The Commonwealth Times*, [Link](#).
- 2020 New Machine Learning Method Amplifies 'Voice of the People' to Reveal Workplace Culture., *Georgia Tech College of Computing Press*, [Link](#).
- 2019 IC Researchers Awarded Outstanding Study Design Paper Award at ICWSM-19., *Georgia Tech School of Interactive Computing Press*, [Link](#).
- 2019 Researchers Use Social Media to Model Stress Following Incidents of Gun Violence on Campus., *Georgia Tech School of Interactive Computing Press*, [Link](#).
- 2018 Language Use on Social Media Could Provide an Unobtrusive Measure of Student Stress Levels Following Incidents of On-Campus Violence., *GVU Center*, [Link](#).

Student Mentorships ---

At Microsoft Research

- 2022 **Primary MSR Intern Mentorship.**
 Anna Kawakami (PhD Student, CMU HCII): [J₂₆, C₂₈, W₁₁]
 Shreya Chowdhary (BS, Olin College): [J₂₆, C₂₈]
- 2022 **Collaborative MSR Intern Mentorship.**
 Yasaman Sefidgar (PhD Student, University of Washington): [C₂₃, J₂₉]
 Vedant Das Swain (PhD Student, Georgia Tech): [C₂₅]
 Jaleh Mahdavi (PhD Student, Ryerson University): [U₁₀]
 Harish Haresamudram (PhD Student, Georgia Tech): [W₁₄]
- 2022 **Other Student Mentorship/Collaborations.**
 Yunhao Yuan (MS/PhD Student, Aalto University): [C₂₆, C₂₇]
 Bhaskar Kotakonda (MS Student, Georgia Tech)
 Shubham Agarwal (MS Student, Georgia Tech)
 Sukriti Bhardwaj (BS Student, Georgia Tech)

At Georgia Tech

- 2016-2021 **Graduate Students.**
 Haomin Lin
 Shrija Mishra [J₁₆, W₈]
 Pranshu Gupta [J₁₆, J₁₇, J₁₈, W₈, U₁₂]
 Asra Yousuf [J₁₇, J₂₃, U₅]
 Manikanta D. Reddy [J₇, J₈, J₉, C₃, C₅, C₇, C₁₂]
 Benjamin Sugar [C₉]
 Jayant Jain [J₁₇]
 Jyoti Narang
 Sheryl Ratnam
 Kunal Agarwal
 Amelia Glaese [J₂₃]
 Andrea Hu [J₁₇]
 Dong Whi Yoo [C₆, C₇]
 Akshay Agarwal
 Sherry Yoo

- 2016-2021 **Undergraduate Students.**
 Caroline Ridley
 Sparsh Kudrimoti
 Nicholas Jaffe [C₉]
 Jordyn Seybolt [J₁₆, C₉]
 Sarah Yoo [C₉]
 Chaitanya Konjeti [C₉]
 Tushna Eduljee
 Yujia Gao [C₉]
 Abhirup Ghosh
 Christin Avery Timmons
 Victor Renard Hill Jr.
 Sang-Chan Kim [J₈]
 Tahirah Ahmad
 Hemang Rajvanshy [J₇, C₁₂]
 Soo Aah Moon [W₆]
 James O'Connor [W₆]

Reviewing, Editing, and Organizational Service

Journals

Editing.

Frontiers in Digital Health
 Frontiers in Psychiatry

Reviewing.

Nature Scientific Reports
 Science Advances
 PLOS One
 Communications of ACM (CACM)
 NPJ Mental Health Research
 Journal of Medical Internet Research (JMIR)
 IEEE Transactions on Affective Computing (TAF)F
 ACM Transactions on Computer-Human Interaction (TOCHI)
 Journal of Psycholinguistic Research (JOPR)
 ACM Transactions on Social Computing (TSC)
 ACM Transactions on the Web (TWEB)
 Journal of Homosexuality
 Journal of Family Violence
 EPJ Data Science
 Information Processing & Management (IPM)
 Early Intervention in Psychiatry
 International Journal of Psychophysiology (INTPSY)
 Proceedings of ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT)
 ACM Digital Threats (DTRAP)
 Discourse Processes, Mental Health & Prevention
 BMC Medical Informatics and Decision Making
 Frontiers in Public Health
 ACM Transactions on Intelligent Systems and Technology (TIST)
 ACM Computing Surveys

Conferences and Workshops**Organizational Committee Membership.**

ACM CHIWork 2024: Student Consortium Chair
 ACM CSCW 2023: Hybrid Chair
 AAAI ICWSM 2022: Virtual Conference Chair
 AAAI ICWSM 2020: Web Chair
 Rethinking Technology for Mental Health and Wellbeing Workshop, Microsoft Research Summit 2022: Co-organizer

AE, SPC, PC Membership.

ACM CHI (2023, 2024)
 ACM CSCW (2022, 2023, 2024)
 AAAI ICWSM (2019, 2020, 2021, 2022, 2023, 2024)
 ACM FAccT (2023)
 WWW/TheWebConf (2020, 2021, 2022, 2023)
 ACM WebSci (2020, 2021, 2022)
 ASONAM (2019)
 EMNLP W-NUT (2019, 2020)
 EACL/NAACL HCI+NLP (2021, 2022)
 ACII ML for Mental Health Workshop (2019)

Reviewing.

ACM CSCW (2017, 2018, 2019, 2020, 2021*, 2022, 2023*, 2024)
 ACM CHI (2017, 2018, 2019, 2020*, 2021*, 2022, 2023, 2024*)
 EMNLP (2021)
 WWW/TheWebConf (2019, 2020, 2021, 2022)
 AAAI ICWSM (2019, 2020, 2021, 2022)
 ACII (2019)
 ACL-IJCNLP (2020, 2021)

* Special Recognition for Outstanding Reviews

Miscellaneous

Skills and Interest	Computational Social Science, Social Computing, FATE, Human-centered Machine Learning, Causal Inference, HCI, Mental Health, Wellbeing, Natural Language, Time Series, Statistical Modeling, Data Science
Programming	Python, R, Java, C, C#, Bash, HTML, MySQL, MongoDB, BigQuery

Languages English, Bengali, Hindi