

Suman Majumder

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Education

Aug 2016– Jun 2020 Ph.D., Statistics, North Carolina State University
Thesis Title: Spatiotemporal inference and applications for large datasets
Advisor: Brian J. Reich
Jul 2014–May 2016 M.Stat., Indian Statistical Institute
Jul 2011–May 2014 B.Stat., Indian Statistical Institute

Experience

Jul 2020–Jun 2021 Postdoctoral Fellow, Department of Nutrition, Harvard T. H. Chan School of Public Health
Jan 2020–Jun 2020 Research Assistant, Department of Entomology and Plant Pathology, North Carolina State University
Aug 2018–Dec 2019 Teaching Assistant, Department of Statistics, North Carolina State University
Aug 2017–Jun 2018 Research Assistant, The Statistical and Applied Mathematical Sciences Institute (SAMSI)
Aug 2016–May 2017 Teaching Assistant, Department of Statistics, North Carolina State University

Honors and Awards

2020 ASA ENVR Student Paper Award Winner
2018 - current Member of NC Alpha chapter of Statistics, *Mu Sigma Rho*
2011 - 2016 KVPY Scholarship, Dept. of Science & Technology, Govt. of India

Publications

Peer-Reviewed Journals

- [1] **Majumder, S.**, Guan, Y., Reich, B. J., O'Neill, S. and Rappold, A. G. (2020); [Statistical Downscaling with Spatial Misalignment: Application to wildland Fire PM_{2.5} Concentration Forecasting](#); Journal of Agricultural, Biological and Environmental Statistics.
- [2] **Majumder, S.**, Biswas, A., Roy, T., Bhandari, S., and Basu, A. (2020); [Statistical Inference Based on a New Weighted Likelihood Approach](#); Metrika.
- [3] Haskett, M. E., **Majumder, S.**, Kotter-Grühn, D. and Gutierrez, I. (2020); [The role of university students' wellness in links between homelessness, food security, and academic success](#). Journal of Social Distress and the Homelessness
- [4] Biswas, A., **Majumder, S.**, Niyogi, P. G. and Basu, A. (2020); [A Weighted Likelihood Approach to Problems in Survival Data](#). Sankhyā.
- [5] Haskett, M. E., Kotter-Grühn, D. and **Majumder, S.** (2020); [Prevalence and correlates of homelessness and food insecurity among university students](#) Journal of College Student Development, 61(1), 109-114.
- [6] Biswas, A., Roy, T., **Majumder, S.**, and Basu, A. (2015). [A new weighted likelihood approach](#). Stat, 4(1), 97-107.

Under Review

- [1] Dorman, S. J., Hopperstad, K. A., Reich, B. J., **Majumder, S.**, Kennedy, G., Reisig, D. D., Greene, J. K., Reay-Jones, F. P. F., Collins, G., Bacheler, J. S., and Huseeth, A. S. (2021+); Landscape-level variation in *Bt* crops predict *Helicoverpa zea* (Lepidoptera: Noctuidae) resistance in cotton agroecosystems; *Submitted, Pest Management Science*
- [2] Giffin, A., Gong, W., **Majumder, S.**, Rappold, A. G., Reich, B. J., Yang, S. (2021+); Estimating intervention effects on infectious disease control: the effect of community mobility reduction on Coronavirus spread; *Submitted, Biometrics*; [ArXiv](#)
- [3] **Majumder, S.**, Guan, Y., Reich, B. J., Saibaba, A. K. (2020+); Kryging: Geostatistical analysis of large-scale datasets using Krylov subspace methods; *Submitted, Journal of Computational and Graphical Statistics*; [ArXiv](#)

Technical reports

- [1] Biswas, A., Niyogi, P. G., **Majumder, S.**, Bhandari, S. K., Ghosh, A., and Basu, A. (2018). [Theoretical Properties of a New Weighted Likelihood Estimator for Right Censored Data](#).

Presentations

Papers

- [1] **Majumder, S.**, Guan, Y., Reich, B. J. & Rappold, A. G.; Statistical Downscaling with Spatial Misalignment; Center for Air pollution,energy and health Research, Webinar series, 2020.
- [2] **Majumder, S.**, Guan, Y., Reich, B. J. & Rappold, A. G.; Statistical Downscaling with Spatial Misalignment: Application to Wildland Fire PM_{2.5} Concentration Forecasting; ENVR Student Paper Awards Section, Joint Statistical Meetings, 2020.
- [3] **Majumder, S.**, Biswas, A., Roy, T., & Basu, A.; Statistical Inference Based on a New Weighted Likelihood Approach; International Conference on Robust Statistics, Kolkata, India, 2015.

Posters

- [1] **Majumder, S.**, Guan, Y., Reich, B. J. & Rappold, A. G.; Statistical Downscaling with Spatial Misalignment: Application to Wildland Fire PM_{2.5} Emissions Forecasting; Poster session presented at the 2018 IISA International Conference on Statistics, University of Florida, Gainesville, Florida, USA.
- [2] **Majumder, S.**, Guan, Y., Reich, B. J. & Rappold, A. G.; Statistical Downscaling with Spatial Misalignment: Application to Wildland Fire PM_{2.5} Emissions Forecasting; Poster session presented at 2018 SAMSI Graduate Poster Session, North Carolina State University, Raleigh, North Carolina, USA .
- [3] **Majumder, S.**, Guan, Y., Reich, B. J. & Rappold, A. G.; Statistical Downscaling with Spatial Misalignment: Application to Wildland Fire PM_{2.5} Emissions Forecasting; Poster session presented at 2019 IMS/ASA Spring Research Conference, Virginia Polytechnic Institute and State University, Blacksburg, Virginia, USA.
- [4] **Majumder, S.**, Guan, Y., Reich, B. J. & Rappold, A. G.; Statistical Downscaling with Spatial Misalignment: Application to Wildland Fire PM_{2.5} Emissions Forecasting; Poster session presented at 2019 Joint Statistical Meetings, Denver, Colorado, USA.

Professional Activities

- Reviewer, Computational Statistics & Data Analysis, 2020.

Social Activities

- Volunteer, Service Raleigh, 2019.
- Head, Sponsorship Committee, Integration: the annual techno-cultural fest of Indian Statistical Institute, Kolkata, 2015.

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- Member, Literary Activities Committee, Boys' Hostel of Indian Statistical Institute, 2013-2014.
- Head, Advertising Committee, Reunion Celebration Committee of Rahara Ramakrishna Mission Boys' Home, 2013.
- Member, Literary Activities Committee, Boys' Hostel of Indian Statistical Institute, 2012-2013.