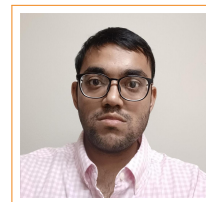


RANADEEP DAW

CURRICULUM VITAE

Department of Statistics
University of Missouri - Columbia
☎ (573)818-5673
✉ ranadeepdaw@mail.missouri.edu
🌐 dawranadeep.owlstown.net



Current Position

Graduate Research Assistant, Department of Statistics, University of Missouri - Columbia

Research Interests

Spatiotemporal Modeling, Low-rank Methodologies, Data Reduction, Random Neural Networks, Computational Statistics, Bayesian Analysis

Education

Jan 2018– **Ph.D. in Statistics**, *University of Missouri - Columbia*

GPA: 3.878

Advisor: Dr. Christopher K. Wikle

Thesis topic: Different Applications of Karhunen-Loève Expansion in Spatiotemporal Modeling and Methodologies

Expected Summer 2023

Graduation:

2014–2016 **Master of Statistics (M. Stat.)**, *Indian Statistical Institute*, Kolkata

2011–2014 **Bachelor of Statistics (B. Stat.)**, *Indian Statistical Institute*, Kolkata

Work Experience

Aug 2018– **Intern**, *Missouri Department of Conservation*, Columbia, MO

Jul 2019 Served as part of my research assistantship. Worked on species distribution models, small area estimation, and bootstrapping.

Jun 2016– **Data Scientist**, *Deloitte US India*, Hyderabad, India

Dec 2017 To address statistical queries in various business-related sectors and implement them in user-friendly tools for third-party use. Worked on real-world data from the insurance, banking, medical, and retail sectors.

May 2015– **Research Intern**, *General Electric*, Bangalore, India

Jul 2015 Implement fast heuristic time series algorithms.

May 2014– **Intern**, *FinIQ*, Pune, India

Jul 2014 Visual Basic-based automation of financial algorithms in Excel.

Research Projects

Accepted Papers

- 1 **Daw, R.**, Simpson, M., Wikle, C. K., Holan, S. H., Bradley, J. R. (2022). An Overview of Univariate and Multivariate Karhunen Loève Expansions in Statistics. *Journal of the Indian Society for Probability and Statistics*, 1–42.

- 2 Yeasmin, F., **Daw, R.**, Chakraborty, B., Gupta, A., Bhattacharya, S., Chakraborty, B. (2021). A New Growth Rate Measure in Identifying Extended Gompertz Growth Curve and Development of Goodness-of-fit Test. *Calcutta Statistical Association Bulletin*, Volume 73, 127–145.
- 3 Chakraborty, S., Menifield, C. E., **Daw, R.** (2022). Does Changing Handgun Laws Affect Crime Rates? *Submitted, Journal of Public Management and Social Policy*.

Submitted Papers

- 4 **Daw, R.**, Wikle, C. K. (2022+). REDS: Random Ensemble Deep Spatial prediction. *Invited Revision, Environmetrics*.
- 5 **Daw, R.**, Wikle, C. K. (2022+). Supervised Spatial Regionalization using the Karhunen-Loève Expansion and Minimum Spanning Tree. *Invited Revision, Journal of Data Science*.
- 6 Schliep, E. M., Wikle, C. K., **Daw, R.** (2022+). Correcting spatial Gaussian process parameter and prediction variance estimation under informative sampling. *Submitted, Journal of Geographical Systems*.

Ongoing Papers

- 7 **Daw, R.**, Wikle, C. K. (2022+). Application of coresets in Spatial Modeling.
- 8 **Daw, R.**, Wikle, C. K., Bradley, J. R., Holan, S. H., Simpson, M. (2022+). A Multivariate Criterion for Spatial Aggregation.
- 9 **Daw, R.**, Wikle, C. K. (2022+). NGREDS: Non-Gaussian Random Ensemble Deep Spatial prediction.

Conferences

Invited Talks

- 2021 **JSM**, (*Joint Statistical Meetings*), Application of coresets in Spatial Modeling.

Contributed Talks

- 2021 **IISA Conference**, (*International Indian Statistical Association*), Application of coresets in Spatial Modeling.
- 2020 **JSM**, (*Joint Statistical Meetings*), Uncertainty Quantification and Inference for Spatiotemporal Forecasting via Echo State Mixture Density Networks with Relevance Propagation.

Poster Presentations

- 2022 **Applied Statistics Symposium**, *ICSA (International Chinese Statistical Association)*, REDS: Random Ensemble Deep Spatial prediction.
- 2019 **Deep Learning Program Opening Workshop**, *SAMSI (Statistical and Applied Mathematical Sciences Institute)*, Deep Neural Network in Cusp Catastrophe Model
- 2018 **Innovations in Design, Analysis, and Dissemination**, *Frontiers in Biostatistical Methods*, Does Changing Handgun Laws Affect Crime Rates?

Technical Expertise

- Computing MATLAB, Python, SAS, R.
- Programming C, C++, L^AT_EX.
- Visualization Tableau, HTML, JavaScript, JavaScript-D3.
- Cloud Lewis cluster, Nautilus, Google colab.

Teaching Experience

- Spring 2020 **Graduate Instructor**, *Stat 3500*, Probability and Statistics - II
- *Topics*: ANOVA, Linear and Logistic Regression, Nonparametric Statistics, Introduction to R.
 - *Responsibilities*: Instruction and evaluation.
 - *Mode*: Both online and classroom.
 - *Special Mention*: **Data Analysis project** as Final examination.
- Fall 2019 **Graduate Instructor**, *Stat 3500*, Probability and Statistics - II
- *Topics*: ANOVA, Linear and Logistic Regression, Nonparametric Statistics, Introduction to R.
 - *Responsibilities*: Instruction and evaluation.
 - *Mode*: Classroom.
- Spring 2018 **Teaching Assistant**, Evaluation of examination and homework of various graduate and undergraduate Statistics courses.

Academic Awards

- 2020– Currently being supported by research grants from the **National Science Foundation**.
- 2011–2016 Received the **INSPIRE** scholarship administered by the Department of Science and Technology of the Government of India.
- 2010 Cleared the **Regional Mathematical Olympiad** and qualified for the national level examination.

Miscellaneous

Leadership Experience

- 2019–20 Committee member of the Statistics graduate students association at University of Missouri - Columbia.
- 2015 General Secretary of the annual techno-cultural and sports festival at the Indian Statistical Institute, Kolkata.
- 2014–15 Student Representative of the boys' hostel of Indian Statistical Institute, Kolkata.
- 2014 Treasurer of the annual college techno-cultural and sports festival at the Indian Statistical Institute, Kolkata.
- 2012–14 Member of food, sports, and cultural committees at the boys' hostel of Indian Statistical Institute, Kolkata.

Mentoring Experience

Responsible for mentoring two newly-hired employees at Deloitte. Worked on a coding project with one mentee.

Extracurricular Activities

Play contract bridge, soccer.

Languages Known

English, Bengali (mother tongue), Hindi.

I hereby do certify that all the above information is true to the best of my knowledge.

Ranadeep Daw

September 19, 2022