Abhirup Datta

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Academic Appointments

2016–Prsent   Assistant Professor, *Department of Biostatistics*, Johns Hopkins Bloomberg School of Public Health.

Education

2012–2016   Ph.D., Biostatistics, *University of Minnesota*, Minneapolis.
Advisers: Dr. Sudipto Banerjee and Dr. Hui Zou

2008–2010   M.Stat., *Indian Statistical Institute*, Kolkata, India.
Specialized in Math-Stat-Probability

2005–2008   B.Stat., *Indian Statistical Institute*, Kolkata, India.

Research Interests

Spatial and spatio-temporal data, High dimensional data, Bayesian statistics, Small Area Estimation, Applications to environmental and ecological data

Papers:

* indicates equal contributions

Datta, A., Banerjee, S., Finley, A.O. and Gelfand, A.E. (2016) *Hierarchical Nearest Neighbor Gaussian Process models for Large Geostatistical Datasets*, Journal of the American Statistical Association, vol. 111, no. 514, pp. 800-812, 2016.

Datta, A., Banerjee, S., Finley, A.O., Hamm, N.A.S. and Schaap, M. (2016) *Non-separable Dynamic Nearest Neighbor Gaussian Process Models for Large Spatio-temporal Data with Application to Particulate Matter Analysis*, Annals of Applied Statistics, vol. 10, no. 3, pp. 128-1316, 2016.

Datta, A., Banerjee, S., Finley, A.O. and Gelfand, A.E. (2016) *On nearest-neighbor Gaussian process models for massive spatial data*, Wiley Interdisciplinary Reviews: Computational Statistics, vol. 8, no. 5, pp. 162-171, 2016.

Datta, A. and Zou, H. 2016 *CoCoLasso for High-dimensional Error-in-variables Regression* Annals of Statistics (Accepted) [ArXiV]

Datta, A., Zou, H. and Banerjee, S. (2015) *Bayesian Inference for High-dimensional Changing Linear Regression with Application to Minnesota House Price Index Data* (Submitted) [ArXiV]

Butler, E.E.*, **Datta, A.*** et al. (Submitted) *Mapping Global Leaf Trait Distributions*

Datta, A., Banerjee, S. and Hodges, J. S. (In preparation) *Directed Acyclic Graph Autoregressive Model for Areal Datasets*

Finley, A.O., **Datta, A.** and Banerjee, S. (In preparation) *On the Implementation of Bayesian Nearest-Neighbor Gaussian Process Models for Massive Spatial Data*

Awards

Fellowships and Grants

2015 Inter-disciplinary Doctoral Fellowship 2015-16, *University of Minnesota, Graduate School*, Minneapolis, MN.

2015 Professional Development Grant, *School of Public Health, University of Minnesota*, Minneapolis, MN.

2013 Dean's Ph.D. Scholarship Award, *School of Public Health, University of Minnesota*, Minneapolis, MN.

Teaching Award

2014 Outstanding Teaching Assistant Award, *Division of Biostatistics, University of Minnesota*, Minneapolis, MN.

Conference Travel Awards

2016 ENAR Distinguished Student Paper Award, *International Biometric Society*, Austin, TX.

2015 G70 Conference, *Duke University*, Durham, NC.

2014 JSM Student Paper Award, *American Statistical Association, Section on Bayesian Statistical Science*, Boston, MA.
Also selected for best paper award in Statistics and the Environment Section

2014 ISBA World Meeting, *International Society for Bayesian Analysis*, Cancun, Mexico.

2014 Conference on Non-parametric Statistics for Big Data and Celebration to Honor Professor Grace Wahba, *University of Wisconsin*, Madison, WI.

2014 Pan-American Advanced Study Institute on Spatio-Temporal Statistics, *Travel grant from National Science Foundation*, Buzios, Brazil.

Other awards

2016 Delta Omega Honorary Society Student Inductee (Pi Chapter), Minneapolis, MN.

2016 Best Student Seminar Presentation Award, *Division of Biostatistics*, University of Minnesota, Mineapolis, MN.

2015 Public Health Impact Award, *School of Public Health Research Day, University of Minnesota* , Minneapolis, MN.

2015 Finalist, *Dow Sustainability Innovation Student Challenge Award (SISCA)*, Institute on the Environment, Minneapolis, MN.

2014 Best Paper Award, *Division of Biostatistics, University of Minnesota*, Minneapolis, MN.

2014   Second prize for best abstract and presentation, *School of Public Health Research Day, University of Minnesota*, Minneapolis, MN.

2003-2008   Awards for academic excellence in several semesters, *Indian Statistical Institute*, Kolkata, India.

Presentations

Aug 2016   Contributed, *Joint Statistical Meetings*, Chicago, IL.

Mar 2016   Contributed, *Eastern North American Region Meetings (ENAR), International Biometric Society*, Austin, TX.

Feb 2016   Invited, *Department of Statistical Science, Duke University*, Durham, NC.

Feb 2016   Invited, *Department of Biostatistics, University of Michigan*, Ann Arbor, MI.

Feb 2016   Invited, *Department of Biostatistics, Johns Hopkins University*, Baltimore, MD.

Feb 2016   Invited, *Department of Statistics, University of California*, Irvine, CA.

Feb 2016   Invited, *Department of Biostatistics, University of North Carolina*, Chapel Hill, NC.

Jan 2016   Invited, *Division of Biostatistics Student Seminar, University of Minnesota*, Minneapolis, MN.

Dec 2015   Invited, *2015 International Indian Statistical Association Conference*, Pune, India.

Dec 2015   Contributed, *2015 Dow Sustainability Innovation Student Challenge Award (SISCA)*, Minneapolis, MN.

Apr 2015   Poster, *G70: A Celebration of Alan Gelfand's 70th Birthday*, Durham, NC.

Apr 2015   Poster, *University of Minnesota School of Public Health Annual Research Day*, Minneapolis, MN.

Mar 2015   Contributed, *Eastern North American Region Meetings (ENAR), International Biometric Society*, Miami, FL.

Aug 2014   Contributed, *Joint Statistical Meetings*, Boston, MA.

Jul 2014   Poster, *ISBA World Meeting*, Cancun, Mexico.

Jun 2014   Contributed, *Pan-American Advanced Study Institute on Spatio-Temporal Statistics*, Buzios, Brazil.

Jun 2014   Poster, *Conference on Nonparametric Statistics for Big Data and Celebration to Honor Professor Grace Wahba*, Madison, WI.

Apr 2014   Poster, *University of Minnesota School of Public Health Annual Research Day*, Minneapolis, MN.

Mar 2014   Contributed, *Eastern North American Region Meetings (ENAR), International Biometric Society*, Baltimore, MD.

Oct 2013   Poster, *University of Minnesota U-Spatial Symposium*, Minneapolis, MN.

Aug 2010   Invited, *Mahalanobis International Symposium on Statistics*, Kolkata, India.

Research Experience

2015–2016	Inter-disciplinary Doctoral Dissertation Fellow, *Institute on the Environment, University of Minnesota*, Minneapolis, MN. *Mentor*: Dr. Arindam Banerjee
2012-2015	Research Assistant, *Division of Biostatistics, University of Minnesota*, Minneapolis, MN. *Supervisor*: Dr. Sudipto Banerjee
Summers of 2015 & 2014	Research Consultant, *Geospatial Lab, Michigan State University*. *Supervisor*: Dr. Andrew O. Finley
Summer 2007	Visiting Student Research Program (Mathematics), *Tata Institute of Fundamental Research*, Mumbai, India.

Teaching Experience

Teaching Assistant, Division of Biostatistics, University of Minnesota

Spring 2015	Advanced Statistical Inference. Instructors: Dr. Cavan Reilly and Dr. David Vock
Fall 2014	Probability Models for Biostatistics. Instructor: Dr. Baolin Wu
Spring 2014	Bayes Decision Theory and Data Analysis. Instructor: Dr. Sudipto Banerjee
Spring 2014	Advanced Statistical Inference. Instructors: Dr. Julian Wolfson and Dr. David Vock
Fall 2013	Probability Models for Biostatistics. Instructor: Dr. Baolin Wu
Spring 2012	Advanced Regression. Instructor: John Hughes, Ph.D
Fall 2012	Statistical Methods for Correlated Data. Instructor: Dr. Julian Wolfson

Work Experience

2011–2012	Quantitative Analyst, *Morgan Stanley*, New York, NY.
2010–2011	Quantitative Analyst, *Morgan Stanley*, Mumbai, India.
Summer 2009	Quantitative Analyst Intern, *Morgan Stanley*, Mumbai, India.
Summer 2008	Analytics Intern, *SYSTAT Software Asia Pacific Ltd*, Bangalore, India.

Professional Activities

Reviewer for	*Journal of the American Statistical Association*
	Annals of Applied Statistics
	Biometrics
	Journal of the Royal Statistical Society

	Environmetrics
	Spatial Statistics
	Statistics in Medicine
	Advances in Statistical Climatology, Meteorology and Oceanography
Session Chair	*Joint Statistical Meetings, 2014, Boston, MA*

Professional Memberships

American Statistical Association

Eastern North American Region International Biometric Society