

Curriculum Vitae - Deepayan Sarkar

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Education

2000-2006 Ph.D (Statistics), University of Wisconsin-Madison. Dissertation topic: “On the Analysis of Optical Mapping Data”.

1998-2000 M.Stat with distinction, Indian Statistical Institute

1995-1998 B.Stat (Hons), Indian Statistical Institute

Employment

2009-Present Assistant Professor, Theoretical Statistics and Mathematics Unit, Indian Statistical Institute, Delhi.

2006-2009 Postdoctoral Research Fellow in Computational Biology, Public Health Sciences at the Fred Hutchinson Cancer Research Center.

Teaching

2004-2005 Co-instructor for the Summer Institute for Training in Biostatistics (SIBS) program at UW Madison.

2001-2002 Teaching Assistant for Statistics 849 (Fall 2001) and 850 (Spring 2002), *Theory & Application of Regression & Analysis of Variance (I and II)*. This is a two semester sequence of graduate courses that are required for students completing an M.S. in Statistics at UW-Madison.

2000-2001 Teaching Assistant for Statistics 301, *Introduction to Statistics* at UW Madison.

Awards

- The 2004 John M. Chambers Statistical Software Award for “Lattice: A package implementing Trellis Graphics in R”

Publications

- Brian Teague, Michael S. Waterman, Steven Goldstein, Konstantinos Potamouisis, Shiguo Zhou, Susan Reslewic, Deepayan Sarkar, Anton Valouev, Christopher Churas, Jeffrey M. Kidd, Scott Kohn, Rodney Runnheim, Casey Lamers, Dan Forrest, Michael A. Newton, Evan E. Eichler, Marijo Kent-First, Urvashi Surti, Miron Livny, and David C. Schwartz. High-resolution human genome structure by single-molecule analysis. *Proceedings of the National Academy of Sciences*, 107(24):10848–10853, 2010.
- Yi Cao, Zizhen Yao, Deepayan Sarkar, Michael Lawrence, Gilson J. Sanchez, Maura H. Parker, Kyle L. MacQuarrie, Jerry Davison, Martin T. Morgan, Walter L. Ruzzo, Robert C. Gentleman, Stephen J. Tapscott. Genome-wide MyoD Binding in Skeletal Muscle Cells: A Potential for Broad Cellular Re-programming. *Developmental Cell*, 18(4):662–674, 2010.
- Kyongryun Lee, Florian Hahne, Deepayan Sarkar, Robert Gentleman. iFlow: A Graphical User Interface for Flow Cytometry Tools in Bioconductor. *Advances in Bioinformatics* vol. 2009, Article ID 103839, 3 pages, 2009. doi:10.1155/2009/103839.
- F. Hahne, N. Le Meur, R. R. Brinkman, B. Ellis, P. Haaland, D. Sarkar, J. Spidlen, E. Strain, R. Gentleman. flowCore: a Bioconductor package for high throughput flow cytometry. *BMC Bioinformatics* 10(1):106, 2009.
- D. Sarkar, R. Parkin, S. Wyman, A. Bendoraite, C. Sather, J. Delrow, A. Godwin, C. Drescher, W. Huber, R. Gentleman, and M. Tewari. Quality assessment and data analysis for microRNA expression arrays. *Nucleic Acids Research*, 37 (2): e17, 2008.
- Deepayan Sarkar. *Lattice: Multivariate Data Visualization with R*. Springer, New York, 2008. URL: <http://lmdvr.r-forge.r-project.org>. ISBN 978-0-387-75968-5.
- D. Sarkar, N. Le Meur, R. Gentleman. Using flowViz to visualize flow cytometry data. *Bioinformatics* 24(6):878–9, 2008.
- Deepayan Sarkar. Extending lattice: using generics and methods to implement new visualization methods within the Trellis framework. *Computational Statistics*, 2008. doi:10.1007/s00180-007-0098-0.
- V. J. Carey, J. Gentry, D. Sarkar, R. Gentleman, and S. Ramaswamy. SGDI: system for genomic data integration. In *Proceedings of the Pacific Symposium on Biocomputing 2008* 141–152, 2008.
- T. Chiang, D. Scholtens, D. Sarkar, R. Gentleman, W. Huber. Coverage and error models of protein-protein interaction data by directed graph analysis. *Genome Biology*, 8 (9):R186, 2007.

- M. A. Newton, A. Noueiry, D. Sarkar, P. Ahlquist. Detecting differential gene expression with a semiparametric hierarchical mixture method. *Biostatistics*, 5 (2):155–176, 2004.
- M. G. Edwards, D. Sarkar, R. Klopp, J. D. Morrow, R. Weindruch, T.A. Prolla. Age-related impairment of the transcriptional responses to oxidative stress in the mouse heart. *Physiological Genomics* 13 (2):119-127, 2003.
- Deepayan Sarkar. Some Notes on lattice. *Proceedings of the 3rd International Workshop on Distributed Statistical Computing*, 2003.
- Deepayan Sarkar. Lattice. *R News* 2/2:19–23, 2002.

New Delhi, November 17, 2010