

## Soudeep Deb

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CONTACT	Department of Statistics University of Chicago George Herbert Jones Laboratory 5747 S. Ellis Avenue Chicago, IL, USA. 60637	Webpage: <a href="http://soudeepd.github.io">soudeepd.github.io</a> Phone: +1 (312)709-0673 E-mail: <a href="mailto:sdeb@uchicago.edu">sdeb@uchicago.edu</a> <a href="mailto:soudeep.deb@gmail.com">soudeep.deb@gmail.com</a>
CITIZENSHIP	India	
RESEARCH INTERESTS	Time series data, Spatio-temporal modeling, Spatial statistics, Inference for random processes, Application of statistics in sports.	
EDUCATION	<b>University of Chicago</b> , Chicago, IL, USA.  <b>Ph.D., Statistics</b> Aug 2018 (expected) <ul style="list-style-type: none"><li>• Thesis: Irregular spaced random field, Spatio-temporal data and Clustering of time series</li><li>• Advisor: <a href="#">Dr. Wei Biao Wu</a></li><li>• Other committee members: <a href="#">Dr. Ruey S. Tsay</a> and <a href="#">Dr. Michael L. Stein</a></li></ul> <b>Indian Statistical Institute</b> , Kolkata, WB, India.  <b>Master of Statistics (M. Stat.)</b> May 2013 <ul style="list-style-type: none"><li>• First Division with Distinction</li><li>• Specialization: Mathematical Statistics and Probability</li><li>• Dissertation: Association analysis for identifying rare genetic variants</li><li>• Advisor: <a href="#">Dr. Saurabh Ghosh</a></li></ul> <b>Bachelor of Statistics (B. Stat.)</b> May 2011 <ul style="list-style-type: none"><li>• First Division with Distinction</li></ul>	
HONORS	<b>University of Chicago:</b> <ul style="list-style-type: none"><li>• International House Ralph W. Nicholas Fellowship Award 2017-18</li><li>• Graduate Council Travel Fund Award 2017</li><li>• Senior Consultant, Department of Statistics 2016-17</li><li>• Runner-up for Department of Statistics Consulting Award 2016</li><li>• Nominated for Best Teaching Assistant in Physical Sciences Division Winter 2014</li></ul> <b>Other Awards:</b> <ul style="list-style-type: none"><li>• Kishore Vaigyanik Protsahan Yojana scholarship, Indian Institute of Science 2007 to 2013</li><li>• Selected for International Mathematical Olympiad Training Camp, India 2007 &amp; 2008</li></ul>	
TEACHING EXPERIENCE	<b>Instructor</b> , at University of Chicago: <ul style="list-style-type: none"><li>• Introductory Statistics, <a href="#">Chicago Academic Achievement Program</a>. Summers of 2015, 2017</li><li>• Statistical Models and Methods I Winter 2015</li></ul> <b>Teaching Assistant</b> , at University of Chicago: <ul style="list-style-type: none"><li>• Statistical Theory and Methods I Winter 2014, Autumns of 2014, 2016, 2017</li><li>• Bayesian Analysis and Principles of Statistics Spring 2017</li><li>• Statistical Theory and Methods II Winter 2018, Springs of 2014, 2016</li><li>• Applied Linear Statistical Methods Autumn 2015</li></ul>	

PUBLICATIONS  
AND ONGOING  
RESEARCH

1. El Machkouri, M., **Deb, S.**, Wu, W. B.; Simultaneous inference for high dimensional random field; In preparation.
2. **Deb, S.**, Wu, W. B. (2018+); Clustering of Time Series Data using Spectral Density Estimates; Under review, International Conference on Machine Learning 2018.
3. **Deb, S.**, Tsay, R. S. (2017+); Spatio-temporal Models with Space-time Interaction and Their Applications to Air Pollution Data; Under review, Statistica Sinica, Preprint available at <https://arxiv.org/abs/1801.00211>.
4. **Deb, S.**, Pourahmadi, M., Wu, W. B. (2017); An Asymptotic Theory for Spectral Analysis of Random Fields; Electronic Journal of Statistics, Vol. 11, No. 2, p. 4297-4322.
5. **Deb, S.** (2017); VAR model based clustering method for multivariate time series data; In XXXIV. International Seminar on Stability Problems for Stochastic Models, p. 28.
6. **Deb, S.**, Dey, D. (2017+); Spatial Modeling of Shot Conversion in Soccer to Single out Goalscoring Ability; Under review, Journal of Sports Analytics, Preprint available at <https://arxiv.org/abs/1702.05662>.
7. Chazin, H., **Deb, S.**, Falk, J., Srinivasan, A. (2017+); New Statistical Approaches to Intra-individual Isotopic Analysis and Modeling Birth Seasonality in Studies of Herd Animals; Under revision, Archaeometry.
8. Prickett, K.C., Guterrez, C., **Deb, S.** (2018+); U.S. Family Firearm Ownership and Firearm-Related Child Mortality from 1976 to 2014, Under review, JAMA Pediatrics.
9. Badrinathan, S., **Deb, S.**; Representation in Indian Politics : People's Priorities and Their Effect on Legislative Activity; In preparation.
10. Zechner, C., **Deb, S.**, Koeppl, H. (2013); Marginal Dynamics of Stochastic Biochemical Networks in Random Environments; In Control Conference (ECC), 2013 European, p. 4269-4274, IEEE.
11. Ghosh, S., **Deb, S.** (2013), A Clustering Approach for Mapping Rare Variants Based in Mutual Association. Human Heredity, Vol. 76, No. 2, pp. 98-98.

OTHER  
EXPERIENCE

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| <b>The Alan Turing Institute</b> , London, United Kingdom  | Dec 2017       |
| <ul style="list-style-type: none"> <li>• Position: Delegate for the Data Study Group.</li> <li>• Project: Geospatial time-series analyses to predict demand for a global satellite communications network.</li> </ul>    |                |
| <b>Instituto de Pesquisa Ambiental do Amazônia</b> , Brasília, Brazil  | Jun - Aug 2016 |
| <ul style="list-style-type: none"> <li>• Position: Summer fellow.</li> <li>• Project: Hydropower Construction and Deforestation in the Tapajós River Basin: Linking Forest Cover to Changes in Water Balance.</li> </ul> |                |
| <b>Eidgenössische Technische Hochschule (ETH)</b> , Zurich, Switzerland  | May - Jul 2013 |
| <ul style="list-style-type: none"> <li>• Position: Summer research intern.</li> <li>• Project: Moment-Closure Approximations for Mass-action Models in Chemical Kinetics.</li> </ul>                                     |                |
| <b>Eidgenössische Technische Hochschule (ETH)</b> , Zurich, Switzerland  | Jun - Jul 2012 |
| <ul style="list-style-type: none"> <li>• Position: Summer research intern.</li> <li>• Project: Marginal Dynamics of Stochastic Biochemical Networks in Random Environments.</li> </ul>                                   |                |
| <b>Ministry of Statistics and Programme Implementation</b> , Govt. of India  | May 2012       |
| <ul style="list-style-type: none"> <li>• Position: Team member</li> <li>• Project: Forecasting of Foreign-tourist Arrivals in India.</li> </ul>  |                |

**Johns Hopkins University**, Baltimore, United States of America

May - Jul 2011

- Position: Summer research intern
- Project: Estimating the Genetic Relationship between two Random Individuals from Genome Sequence Data.

- PRESENTATIONS
1. (Invited talk) Spatio-temporal Models with Space-time Interaction and Their Applications to Air Pollution Data. Statistics colloquium, Division of Statistics, Northern Illinois University, Dekalb, USA. Dec 2017
  2. (Contributed talk) VAR Model Based Clustering Method for Multivariate Time Series Data. XXXIV. International Seminar on Stability Problems for Stochastic Models, Debrecen, Hungary. Aug 2017
  3. (Contributed talk) Spatio-temporal Models with Space-time Interaction and Their Applications to Air Pollution Data. NBER/NSF Time Series Conference, New York, USA. Sep 2016
  4. (Invited talk) Hydropower Construction and Deforestation in the Tapajós River Basin: Linking Forest Cover to Changes in Water Balance. Symposium on deforestation, Ministry of Environment, Brasília, Brazil. Aug 2016
  5. (Poster) Estimating the Genetic Relationship between two Random Individuals from Genome Sequence Data. Young Statisticians Conference, Melbourne, Australia. Feb 2013
  6. (Contributed talk) Estimating the Genetic Relationship between two Random Individuals from Genome Sequence Data. Conference on Contemporary Issues and Applications in Statistics, Kolkata, India. Jan 2012
  7. (Invited talk) Estimating the Genetic Relationship between two Random Individuals from Genome Sequence Data. D. Basu Memorial Award Lecture Series, Indian Statistical Institute, Kolkata, India. Sep 2011

PEER REVIEW SERVICES **Worked as a Reviewer** for the following journals:

- Electronic Journal of Statistics
- Statistics and Probability Letters
- Linear Algebra and its Applications

OTHER INFORMATION **Technical strength:**

- R, MATLAB, Python, C, L<sup>A</sup>T<sub>E</sub>X, Microsoft Office.

**Languages:**

- Fluent in reading, writing, speaking: English, Bengali, Hindi.
- Basic reading and speaking: Portuguese.

## REFERENCES

**Wei Biao Wu**

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Department of Statistics and the College  
University of Chicago  
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**Ruey S. Tsay**

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**Michael L. Stein**

Ralph and Mary Otis Isham Professor  
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and Master, Physical Sciences Collegiate Division  
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**Mohsen Pourahmadi**

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TEACHING  
REFERENCE**Linda Brant Collins**

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Department of Statistics and the College  
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