

ASHOKE KUMAR SINHA

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Employment history

- 2014 -** Assistant Professor (designation B), Michigan State University, USA.
- 2009 - 2014** Visiting Assistant Professor, Michigan State University, USA.
- 2005 - 2009** Assistant Professor, Bilkent University, Turkey.
- 2005** Visiting Assistant Professor, Actuarial Institute, The Netherlands.
- 1999 - 2004** Assistant Professor, Tilburg University, The Netherlands.
- 1997 - 1998** Post-doctoral fellow in the Erasmus University, The Netherlands.
- 1993 - 1997** Research assistant in the Erasmus University Rotterdam, The Netherlands.
The research was partly funded by NWO (the Dutch Science Foundation)
and the Neptune Project of the European Union.

Educational Qualifications

- 1993 - 1997** **Ph.D.** *Degree awarded:* October 2, 1997.
Title: ESTIMATING FAILURE PROBABILITY WHEN FAILURE IS RARE: MULTIDIMENSIONAL CASE.
Tinbergen Institute Research Series, no. 165.
Institution: Erasmus University, Rotterdam, The Netherlands.
Advisor: Prof. Dr. Laurens de Haan, and Prof. Dr. John Einmahl.
- 1990 - 1992** **Master of Statistics (M.Stat.)** *Performance:* First division.
Institution: Indian Statistical Institute, Calcutta and Delhi, India.
- 1987 - 1990** **Bachelor of Statistics (B.Stat.)** *Performance:* First division with distinction..
Institution: Indian Statistical Institute, Calcutta, India.

Teaching experience

I have 20 years experience of university teaching. I teach courses on Statistics, Probability, Mathematics, Actuarial Science and Econometrics both at undergraduate and graduate level. I am used to teach through regular lectures, tutorials, computer lab-sessions, activity based courses and online courses. I regularly teach large classes (120-360 students), where I have also the responsibility to lead and instruct teams of teaching assistants (8-10 TAs). I have experience of teaching courses to professionals and also courses to prepare students for competitive exams.

I have created many lecture notes, slides and video lectures. I solely developed curriculum, and also collaborated with colleagues to restructure existing courses. I regularly used and coordinated web-based learning systems such as Lon-Capa, Blackboard etc. I have experience of advising bachelor's projects, and supervising masters' thesis.

Teaching Awards

- **2017:** Received the College of Natural Science (CNS) 2017 Teaching Prize, at the Michigan State University, USA.
- **2000:** Won the *Best Teacher award*, at the Tilburg University, the Netherlands, teaching Mathematical Statistics and Probability courses.

Languages known

English, Dutch, Bengali (native) and Hindi.

Academic Scholarships and Awards

- 1993-1997** Research Fellowship from the Dutch Science Foundation (NWO).
- 1992** Junior Research Fellowship from Council of Scientific and Industrial Research, India.
- 1987-1992** Scholarship to study B.Stat. and M.Stat. at the Indian Statistical Institute.
- 1987** Merit Scholarship from West Bengal Council of Higher Secondary Education.
- 1985** Merit Certificate from All India Science Teachers Association.
- 1985** Merit Scholarship from West Bengal Board of Secondary Education.

Fields of interest

Statistics and Probability. Special interest in the Extreme Value Theory and its applications in actuarial science, financial and engineering related risk estimation - particularly extremes in multidimensional setup for both i.i.d. and time-series data. Working on probability of rare events and quantile estimation in the multidimensional set-up. Also had research work in Econometrics.

Computational Knowledge

Environment	Windows and Unix
Statistical Packages	R, MATLAB, SPSS, Microsoft Excel, Eviews, Minitab
Language	HTML, FORTRAN

Publications

Articles in refereed journals

- IMPROVED BACKPROPAGATION ALGORITHMS BY EXPLOITING DATA REDUNDANCY IN LIMITED-ANGLE DIFFRACTION TOMOGRAPHY, *Progress In Electromagnetics Research B*, Vol. **66** (2016) 1-13, [with Pavel Roy Paladhi, Amin Tayebi, Lalita Udpa, and Satish Udpa].
- ON THEIL'S ERROR, *The Econometrics Journal*, Vol. **8**, (2005) 39-54, [with Jan Magnus].
- ESTIMATING THE PROBABILITY OF A RARE EVENT, *Annals of Statistics*, Vol. **27**, No.2 (1999), 732-759 [with Laurens de Haan].
- ESTIMATING THE SPECTRAL MEASURE OF AN EXTREME VALUE DISTRIBUTION, *Stochastic Processes and their applications* **70** (1997) 143-171 [with John Einmahl and Laurens de Haan].

Articles in non-refereed journals and Technical reports

- ESTIMATION OF EXCEEDANCE PROBABILITY BY MAXIMUM LIKELIHOOD ESTIMATOR *Report: Neptune T400: EUR - 11* (1997) [with Gerrit Draisma, L. Peng and Laurens de Haan].
- ESTIMATING THE FAILURE PROBABILITY OF THE PETTEMER ZEEWERING: THE PARAMETRIC WAY *Report: EUR/RIKZ - 96.2* (1997) [with Gerrit Draisma, L. Peng and Laurens de Haan].

Other articles

- ASYMPTOTIC NORMALITY FOR THE EXPONENT MEASURE. Chapter in the thesis, (1997).

Book review

Book review of *Multivariate Models and Dependence Concepts* by Harry Joe, Monographs on Statistics and Applied Probability **73**, Chapman and Hall, 1997, for the journal *Kwantitatieve Methoden* (1997).

Contribution to scholarly or professional journals

Worked as referee for the following journals: *Annals of Statistics*, *Journal of Statistical Planning and Inference*, *Extremes*, *Computational Statistics and Data Analysis*, *Journal of Financial Econometrics*, *Econometric Reviews*.

Project experience

Worked in the European Union project, called Neptune project, in 1997, resulting in two technical reports and one article.

Conferences

Presented articles in several international conferences,

- Barcelona, 2004 - Meetings of International Statistical Institute.
- Berlin 2003 - Meetings of International Statistical Institute.
- New York, 2002 - IMS Joint Statistical Meeting.
- Helsinki, 1999 - Meetings of International Statistical Institute.
- Vienna, 1997 - Bernoulli Congress.
- Rotterdam, 1995 - 9th European Young Statisticians Meeting.
- Statistics Day 1998, Utrecht - invited speaker.

National conferences and Seminar presentation

Presented articles in seminars at the following Universities or meetings:

Young scientists presentation - Stochastic Netwerk Nederland 1996, University of Amsterdam, Erasmus University Rotterdam, Tilburg University, Technological University of Eindhoven [all in The Netherlands], The University of Birmingham, York University, Southampton Oceanography Centre [all in UK], Bilkent University, Middle East Technical University, Central Bank of the Republic of Turkey [all in Turkey], Indian Statistical Institute, Delhi and Calcutta, India.

Miscellaneous

- Co-organized 9th European Young Statisticians Meeting, Rotterdam (1995).
- Organized and participated in study-groups in the Tilburg University.
- Previewed a forthcoming Statistics and Probability book by Karim Abadir and Jan Magnus.
- Worked as coordinator of Blackboard Course Information system (a web-based learning system) at the Tilburg University.
- Served as a Ph.D. committee member at the Tilburg University (candidate: Dr. Lin Tao).

Reference

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