CURRICULUM VITAE
OF
ANIL KUMAR GHOSH

ADDRESS FOR CORRESPONDENCE

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PERSONAL DETAILS

Date of Birth   : August 27, 1974.
Nationality   : Indian.
Gender   : Male.
Marital Status : Married.

EDUCATION

Ph.D. from Indian Statistical Institute in 2004.
  Thesis title: Some nonparametric and semiparametric methods for discriminant analysis.
  Thesis supervisor: Prof. Probal Chaudhuri.

Master of Statistics (first class with distinction) from Indian Statistical Institute in 1998.

Bachelor of Science with first class honours in statistics from Presidency College, Kolkata in 1996.

HONOURS

Associate of Indian Academy of Sciences since 2007.

Elected member of International Statistical Institute since 2006.

ACADEMIC POSITIONS

Oct, 2004 -Feb, 2005	: Postdoctoral Research Fellow, Institute of Statistical Science, Academia Sinica, Taipei, Taiwan.
Mar, 2005 -Sep, 2005	: Visiting Scientist, Theoretical Statistics and Mathematics Unit, Indian Statistical Institute, Kolkata,India.
Oct, 2005 -Sep, 2006	: Research Associate, Center for Mathematics and its Applications, Australian National University, Canberra, Australia.
Oct, 2006 to May, 2008	: Assistant Professor, Department of Mathematics and Statistics, Indian Institute of Technology, Kanpur, India.
May, 2008 to date	: Assistant Professor, Theoretical Statistics and Mathematics Unit, Indian Staistical Institute, Kolkata, India.

RESEARCH INTERESTS

Nonparametric and Robust Statistics, Statistical Pattern Recognition, Multi-scale Smoothing, Machine learning, Statistical Computing.

LIST OF PUBLICATIONS

Journal Publications

1. Ghosh, A. K. and Chaudhuri, P. (2004) Optimal smoothing in kernel discriminant analysis. *Statistica Sinica*, **14(2)**, 457-483.

2. Ghosh, A. K. and Bose, S. (2004) Backfitting neural networks. *Computational Statistics*, **19(2)**, 193-210.

3. Ghosh, A. K. and Chaudhuri, P. (2005) Data depth and distribution free discriminant analysis using separating surfaces. *Bernoulli*, **11(1)**, 1-27.

4. Ghosh, A. K. and Chaudhuri, P. (2005) On maximum depth classifiers. *Scandinavian Journal of Statistics*, **32(2)**, 327-350.

5. Ghosh, A. K., Chaudhuri,P. and Murthy, C. A. (2005) On aggregation and visualization of nearest neighbor classifiers. *IEEE Trans. on Pattern Analysis and Machine Intelligence*, **27(10)**, 1592-1602.

6. Ghosh, A. K., Chaudhuri, P. and Sengupta, D. (2006) Classification using kernel density estimates: multi-scale analysis and visualization. *Technometrics*, **48(1)**, 120-132.

7. Ghosh, A. K. (2006) On optimum choice of k in nearest neighbour classification. *Computational Statistics and Data Analysis*, **50(11)**, 3113-3123.

8. Ghosh, A. K. and Bandyopadhyay, S. (2006) Adaptive smoothing in kernel discriminant analysis. *Journal of Nonparametric Statistics*, **18(2)**, 181-197.

9. Ghosh, A. K., Chaudhuri, P. and Murthy, C. A. (2006) Multi-scale classification using nearest neighbor density estimates. *IEEE Transactions on Systems, Man and Cybernetics, Part B*, **36(5)**, 1139-1148.

10. Ghosh, A. K. (2007) On nearest neighbor classifiction using adaptive choice of k. *Journal of Computational and Graphical Statistics*, **16(2)**, 482-502.

11. Ghosh, A. K. and Bose, S. (2007) Feature extraction for classification using statistical networks. *International Journal of Pattern Recognition and Artificial Intelligence*, **21(7)**, 1103-1126.

12. Chattopadhyay, R. and Ghosh, A. K. (2008) A quantitative approach to estimate the economic success of entrepreneurs in India. *Journal of Small Business and Entrepreneurship*, **21(1)**, 1-21.

13. Ghosh, A. K. and Hall, P. (2007) On error rate estimation in nonparametric classification. *Statistica Sinica*, **18(3)**, 1081-1100.

14. Ghosh, A. K. (2008) Kernel discriminant analysis using case-specific smoothing parameters. *IEEE Transactions on Systems, Man and Cybernetics, Part B*, **38(5)**, 1413-1418.

15. Chaudhuri, P., Ghosh, A. K. and Oja, H. (2008) Classification based on hybridization of parametric and nonparametric classifiers. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, To appear.

Publications in Conference Proceedings

1. Ghosh, A. K., Chaudhuri, P. and Sengupta, D. (2003) Multi-scale kernel discriminant analysis. *Proceedings of 5th International Conference on Advances in Pattern Recognition* (Ed. D.P.Mukherjee and S. Pal), Allied Publishers, Calcutta, pp. 89-93.

2. Ghosh, A.K. and Bose, S. (2005) Feature extraction for nonlinear classification. *Proceedings of First International Conference on Pattern Recognition and Machine Intelligence* (Ed. S. K. Pal and S. N. Biswas), *Lecture Notes in Computer Science Series, 3776*, pp. 170-175.

3. Ghosh, A.K. (2007) Adaptive nearest neighbor classification. *Proceedings of 6th International Conference on Advances in Pattern Recognition* (Ed. P.Pal), World Scientific, Singapore, pp. 281-284.

Book Reviews

1. Ghosh, A. K. (2006) Review of "S+ Functional Data Analysis User's Guide", *Sankhya*, **68(1)**, 177-178.

2. Ghosh, A. K. (2006) Review of "The Baiscs of S-Plus (Fourth Edition)", *Sankhya*, **68(1)**, 179-181.

3. Ghosh, A. K. (2007) Review of "Applied MANOVA and Discriminant Analysis", *Journal of the American Statistical Association*, To appear.

TEACHING EXPERIENCE

Instructor with full responsibility

- Statistical Simulations and Data Analysis (M.Sc, 2nd Year), Indian Institute of Technology, Kanpur. 2nd Semester, 2006-2007.

- Statistical Pattern Recognition (Elective course for M.Sc, 2nd Year and Ph.D. students), Indian Institute of Technology, Kanpur. 2nd Semester, 2006-2007 & 2nd Semester, 2007-2008.

- Sampling Theory (M.Sc. 1st Year), Indian Institute of Technology, Kanpur. 1st Semester, 2007-2008.

- Statistical Inference (M.Sc 1st Year), Indian Institute of Technology, Kanpur. 2nd Semester, 2007-2008.

- Statistical Methods -III (B.Stat, 2nd Year), Indian Statistical Institute, Kolkata. 1st Semester, 2008-2009.

- Pattern recognition and Image Processing (M.Stat, 2nd Year), Indian Statistical Institute, Kolkata. 2nd Semester, 2008-2009.

Teaching Assistant

- Statistical Methods -II (B.Stat, 1st Year), Indian Statistical Institute, Kolkata. 2nd Semester, 1998-1999.

- Linear Models (B.Stat, 3rd Year), Indian Statistical Institute, Kolkata. 1st Semester, 1999-2000.

- Pattern Recognition (Elective course for M.Stat 2nd Year), Indian Statistical Institute, Kolkata. 2nd Semester, 1999-2000.

- Statistical Methods -I (B.Stat, 1st Year), Indian Statistical Institute, Kolkata. 1st Semester, 2001-2002.

- Statistical Methods-II (B.Stat, 1st Year), Indian Statistical Institute, Kolkata. 2nd Semester, 2003-2004.

OTHER PROFESSIONAL EXPERIENCE

Served as a reviewer for

- Advances in Statistical Analysis

- Calcutta Statistical Association Bulletin

- Communication in Statistics - Theory and Methods

- Computational Statistics and Data Analysis

- IEEE Transactions on Pattern Analysis and Machine Intelligence

- IEEE Transactions on Systems, Man and Cybernetics, Part B

- Journal of the American Statistical Association

- Journal of Computational and Graphical Statistics

- Mathematical Reviews

- Sankhya

- Soft computing

- Statistica Sinica

REFERENCES

- Prof. Probal Chaudhuri; Statistics and Mathematics Unit, Indian Statistical Institute, 203, B. T. Road, Kolkata 700108, INDIA. Tel: +91 33 2575 3414, Fax: +91 33 2577 3071, E-mail: probal@isical.ac.in

- Prof. Rahul Mukerjee; Indian Institute of Management, Joka, Diamond Harbour Road, Kolkata 700104, INDIA. Tel: +91 33 2467 8300, Fax: +91 33 2467 8307, E-mail: rmuk1@hotmail.com

- Prof. Hannu Oja; Tampere School of Public Health, University of Tampere, FIN 33014, Tampere, FINLAND. Tel: +358 3 3215 8475, Fax: +358 3 3551 6057, E-mail: Hannu.Oja@uta.fi

- Prof. Peter Hall; Department of Mathematics and Statistics, The University of Melbourne, Parkville, Victoria 3010, AUSTRALIA. Tel: +61 3 8344 5550 (Extn. 44254), Fax: +61 3 8344 4599, E-mail: halpstat@ms.unimelb.edu.au

- Prof. M. C. Jones; Faculty of Mathematics and Computing, The Open University, Milton Keynes, MK7 6AA, UK. Tel: +44 0 1908 652209, Fax: +44 0 1908 652140, E-mail: m.c.jones@open.ac.uk

- Prof. Matt Wand; School of Mathematics and Applied Statistics, University of Wollongong, Northfields Avenue, Wollongong, NSW 2522, AUSTRALIA Tel: +61 2 4221 3556, Fax: +61 2 4221 4845, E-mail: mwand@uow.edu.au