CURRICULUM VITAE

Lifeng Wang

Contact information

Department of Statistics and Probability
Michigan State University
A419 Wells Hall
East Lansing, MI 48823

Phone: (517) 355-8426
Fax: (517) 432-1405
E-mail: wang@stt.msu.edu
http://www.stt.msu.edu/~wang

Research interests

- Large-scale, high-dimensional data analysis
- Variable selection and dimension reduction
- Machine learning and statistical learning theory
- Empirical processes and probability inequalities

Education

University of Minnesota, Minneapolis, MN, USA

Ph.D., statistics, May 2006

- Dissertation Topic: "On L_1-norm multiclass support vector machines: methodology, theory and applications"
- Advisor: Professor Xiaotong Shen

Peking University, Beijing, P.R. China

B.S., Probability and Statistics, May 2000

Employment

Assistant Professor, Department of Statistics and Probability, Michigan State University, 2008-present.

Postdoctoral researcher, Department of Biostatistics and Epidemiology, University of Pennsylvania, 2006-2008.

Refereed publications

Wang, L., Li, H. and Huang, J. (2008) Variable selection in nonparametric varying-coefficient models for analysis of repeated measurements. *Journal of the American Statistical Association*, **103**, 1556-1569.

Shen, X. and **Wang, L.** (2007) Generalization error for multi-class margin classification. *Electronic Journal of Statistics*, **1**, 307-330.

Wang, L., Chen, G. and Li, H. (2007) Group SCAD regression analysis for microarray time course gene expression data. *Bioinfomatics*, **23**, 1486 - 1494.

Wang, L. and Shen, X. (2007) On L_1-norm multi-class support vector machines: methodology and theory. *Journal of the American Statistical Association*, **102**, 583-594.

Shen, X. and **Wang, L.** (2007) Discussion of Koltchinskii's paper entitled "Local Rademacher Complexities and Oracle Inequalities in Risk Minimization". *The Annals of Statistics*, **34**, 2677-2680.

Wang, L., Shen, X. and Yuan, Z. (2006) On L_1-norm multi-class support vector machines. *Machine Learning and Applications 2006*, 83-88. Proceedings of ICMLA '06. the fifth International Conference on December 2006.

Wang, L. and Shen, X. (2006) Multicategory support vector machines, feature selection and solution path. *Statistica Sinica*, **16**, 617-634.

MANUSCRIPTS

Wang, L., Li, H. and Huang, J. (2009) Variable selection for the Cox model with time-varying regression coefficients. Submitted to *Statistica Sinica*.

Wang, J. and **Wang, L.** (2009) Sparse supervised dimension reduction in high dimensional classification. In preparation.

Wang, L. (2009) M-estimation over convex hulls. In preparation.

Wang, L., Luan, Y., and Li, H. (2009) Boosting For high-dimensional linear models with group variables. In preparation.

PRESENTATIONS

Boosting for high-dimensional linear models with grouped variables, Invited, *IMS-China International Conference on Statistics and Probability 2009*, Weihai, China, July 2009.

Boosting for high-dimensional linear models with grouped variables, Invited, *School of Mathematics and System Sciences, Shandong University*, Jinan, China, July 2009.

Variable Selection in Nonparametric Varying-Coefficient Models for Analysis of Repeated Measurements, Topic contributed presentation, *Joint Statistical Meeting*, Denver, CO, August 2008.

Regularization and variable selection in varying-coefficient models and multi-class support vector machines with applications in genomics, Invited, *School of Medicine, Division of Biostatistics, University of Indiana*, Indianapolis, IN, March 2008.

Regularization and variable selection in varying-coefficient models and multi-class support vector machines with applications in genomics, Invited, *Department of Mathematics, University of Oregon*, Eugene, OR, February 2008.

Regularization and variable selection in varying-coefficient models and multi-class support vector machines with applications in genomics, Invited, *Department of Statistics, University of South Carolina*, Columbia, SC, February 2008.

Regularization and variable selection in varying-coefficient models and multiclass support vector machines with applications in genomics, Invited, *Department of Statistics, Rice University*, Houston, TX, February 2008.

Regularization and variable selection in varying-coefficient models and multiclass support vector machines with applications in genomics, Invited, *Department of Probability and Statistics, Michigan State University*, East Lansing, MI, February 2008.

Regularization and variable selection in varying-coefficient models and multiclass support vector machines with applications in genomics, Invited, *Department of Mathematics, University of Arizona*, Tucson, AZ, January 2008.

Regularization and variable selection in varying-coefficient models and multiclass support vector machines with applications in genomics, Invited, *Department of Statistics, Ohio State University*, Columbus, OH, January 2008.

On L_1-norm multiclass support vector machines: classification of high-dimension, low sample size data, Topic contributed presentation, *Joint Statistical Meeting*, Salt lake city, UT, August 2007.

On L_1-norm multiclass support vector machines, Invited, *First UC San Diego Workshop in Statistics, Biostatistics and Bioinformatics: Model selection and Statistical Learning*, San Diego, CA, March 2007.

Variable Selection for Varying Coefficients Models, With Applications to Analysis of Microarray Time Course Gene Expression Data, *ENAR spring meeting*, Atlanta, GA, March 2007.

On L_1-norm multicategory support vector machines, poster presentation, *Digital Technology Center Symposia: Data Mining Open House*, Minneapolis, MN, March 2006.

L_1-norm multicategory support vector machine and its solution path, Invited poster presentation, *Joint Statistical Meeting*, Minneapolis, MN, August 2005.

TEACHING EXPERIENCE

Instructor   Fall 2008-present
MICHIGAN STATE UNIVERSITY
Taught courses STT 863, Applied Statistics Methods I; STT 862, Introduction to Theory of Probability and Statistics II.

Instructor   Spring 2005 - Fall 2005
UNIVERSITY OF MINNESOTA, SCHOOL OF STATISTICS
Taught course STAT 3011 Introduction to statistical analysis. Average enrollment: 70 students. Duties include course design, lectures, exams, homework assignments, and grading.

Recitation Instructor   Fall 2000 - Fall 2004
UNIVERSITY OF MINNESOTA, SCHOOL OF STATISTICS
Taught both graduate and undergraduate level courses. Duties include leading weekly lab recitation, holding office hours and grading.

Honors and awards

Laha travel award, IMS Annual Meeting, 2007.

Excellent Freshman Scholarship, Peking University, 1996.

Winner of National Mathematics Olympics, China, and was admitted by Peking University without National Standard Entrance Examination, 1995.

Service activities

Manuscript Reviewer: Journal of American Statistical Association, Annals of Statistics, Journal of Nonparametric Statistics, Journal of Machine Learning Research, Electronic Journal of Statistics, Statistica Sinica, Statistical Applications in Genetics and Molecular Biology (2005-2009).

Advanced Computer Skills

Programming Laguages: C++/C, HTML
Opearation Systems: Windows, UNIX/Linux
Softwares: R, Matlab, S-plus, SAS, Mathematica, LaTeX

Affiliations

American Statistical Association
Institute of Mathematical Statistics