

Mengyuan Zhao

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EDUCATION

Ph.D. Statistics, University of Pittsburgh, 2010

M.S. Statistics, University of Pittsburgh, 2008

B.S. Statistics, Peking University, 2005

RESEARCH INTERESTS

- Generalized linear models
- Model selection methods
- Penalized splines
- Machine learning
- Computational neuroscience

RESEARCH EXPERIENCE

09/2010 - present Postdoctoral Fellow, Department of Statistics, University of Pittsburgh

Statistical analysis of multineuronal spike train data, programming for lasso and penalized smoothing splines

01/2009 - 08/2010 Research Assistant, Department of Statistics, University of Pittsburgh

Statistical analysis of multineuronal spike train data, programming for lasso and penalized smoothing splines

09/2007 - 08/2008 Research Assistant, Department of Statistics, University of Pittsburgh

Study point processes theory, stochastic modeling of neuronal spike train data

09/2006 - 04/2007 Research Assistant, Department of Statistics, University of Pittsburgh

Statistical analysis of fMRI data, programming for MCMC

01/2007 - 04/2007 Student Consultant, Department of Statistics, University of Pittsburgh

Supervised consulting for university researchers

TEACHING EXPERIENCE

01/2011 - 04/2011 Postdoctoral Fellow, Department of Statistics, University of Pittsburgh

Teach Advanced Applied Multivariate Analysis (PhD level)

01/2009 - 04/2009 Teaching Assistant, Department of Statistics, University of Pittsburgh

Graded for Probability Theory II (PhD level)

09/2008 - 12/2008 Instructor, Department of Statistics, University of Pittsburgh

Taught Introduction to Probability I (Statistics-major undergraduate level)

09/2005 - 04/2007 Teaching Assistant, Department of Statistics, University of Pittsburgh

Led recitations for two introductory statistics service courses

PUBLICATIONS

1. **Mengyuan Zhao** (2010). A Variable Coefficients Model for the Variation of Neuronal Interactions across Trials, in preparation.
2. R.T. Krafty, **Mengyuan Zhao**, D.J. Buysse, J.F. Thayer, M. Hall (2010). Non-Parametric Spectral Analysis of Heart Rate Variability Through Penalized Sum-of-Squares, in preparation.
3. **Mengyuan Zhao**, A.P. Batista, J.P. Cunningham, C. Chestek, Z.R. Alvidrez, R. Kalmar, S. Ryu, K. Shenoy, S. Iyengar (2010). An L_1 -regularized Logistic Model for Detecting Short-term Neuronal Interactions, submitted.
4. **Mengyuan Zhao**, S. Iyengar (2010). Nonconvergence in Logistic and Poisson Models for Neural Spiking. *Neural Computation*, 22(5): 1231-1244.

PRESENTATIONS & POSTERS

- ENAR annual meeting, 03/2010
- ASA Pittsburgh Chapter Banquet, 04/2010
- Statistical Analysis of Neuronal Data (SAND), 05/2010
- Department of Neurology and Neuroscience at Cornell Medical College, 11/2010

HONORS & AWARDS

- Student of the Year, ASA Pittsburgh Chapter, 04/2010
- Outstanding Senior Graduate Student, University of Pittsburgh, 04/2009

- Scholarship, Neuroinformatics, Special Topic Course at Marine Biological Laboratory, 08/2008
- CNBC Scholarship, Interdisciplinary Training in Computational Neuroscience, 05-07/2008
- Travel Grant, Applications in Biology, Dynamics and Statistics, IMA Workshop, 03/2007
- Outstanding Junior Graduate Student, University of Pittsburgh, 04/2006
- Freshman Scholarship, Peking University, 09/2001
- Bronze Medal, Chinese Mathematics Olympiad, 01/2001

COMPUTER SKILLS

- Programming and computation softwares: MATLAB, R, C, SAS
- Text editing softwares: Microsoft Word, Excel, Powerpoint, LaTeX