

Xiaoyan(Iris) Lin

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EDUCATION:

July 2008 (expected) **PhD in Statistics**, University of Missouri-Columbia.
Advisor: Prof. Dongchu Sun.
Dissertation: Bayesian Hierarchical Models for the Recognition-Memory Experiment.
GPA: 4.0/4.0.

2005 **MS in Statistics**, University of Missouri-Columbia.

2001-2003 **Graduate Study**, East China Normal University, Shanghai, China.

2001 **BS in Statistics**, East China Normal University, Shanghai, China.

Spring 2005 **Certified, Program for Excellence in Teaching**, University of Missouri-Columbia.

RESEARCH INTERESTS:

- Bayesian Hierarchical Modeling.
- Objective Bayesian Analysis.
- Item Response Theory.
- Generalized Linear Mixed Models.
- Spatial Analysis.

PROFESSIONAL EXPERIENCES:

February, 2008- present
Graduate Fellow, SAMSI.

- Participate the program on Risk Analysis, Extreme Events and Decision Theory; develop the reference prior for multivariate extreme distributions.

2005- present **Research Assistant** for Prof. Dongchu Sun, Prof. Paul L. Speckman, Dept. of Statistics, and Prof. Jeffery N. Rouder, Dept. of Psychological Sciences, University of Missouri-Columbia.

- Develop Hierarchical Bayesian Models to analyze the memory

processes; apply objective priors (constant prior, right Haar prior, etc.) to improve the estimation of memory parameters.

2006-2007 **Independent Instructor** for *Introduction to Probability and Statistics II*,
University of Missouri-Columbia.

- Responsibilities include: preparation and presentation of lectures, assigning homework, holding office hours, and writing and grading quizzes, tests and final exams. I have also developed the course webpage www.stat.missouri.edu/~xlzt3/stat3500.html.

2004-2005 **Teaching Assistant** for *Elementary Statistics*,
University of Missouri-Columbia.

- Duties include: teaching the recitation classes, teaching Minitab in lab, grading quizzes and exams, holding office hours.

PUBLICATIONS/WORK IN PROGRESS:

Lin, Xiaoyan and Sun, Dongchu (2007). Objective Bayesian Analysis in Memory Study. *2007 Joint Statistical Meeting Proceedings*.

Lin, Xiaoyan, Sun, Dongchu, and Berger, James O. (2007). The Formal Definition of Reference Priors for Multi-dimensional Cases. *Manuscript*.

Lin, Xiaoyan and Sun, Dongchu (2007). Objective Bayesian Analysis in One-way and Two-way Mixed Models for the Binary Response data. *Manuscript*.

Lin, Xiaoyan, Sun, Dongchu, Speckman, Paul L., and Rouder, Jeffery N. (2007). Bayesian Hierarchical Models for the Recognition-Memory Experiment. *Work in progress*.

PROFESSIONAL ACTIVITIES:

- Presented topic contributed paper “Objective Bayesian Analysis in Memory Study”, Salt Lake City, Utah, July, 2007.
- Presented poster “Exploring the General Definition of Two-dimensional Reference priors” in SAMSI summer 2007 program on “Challenges in Dynamic Treatment Regimes and Multistage Decision-Making”, June 18-29, 2007.
- Presented contributed paper "Bayesian Hierarchical Models for the Two-Component Memory Process" at ENAR Spring Meeting, Atlanta, Georgia, March, 2007.
- Attended Bayesian Inference in Econometrics and Statistics, St. Louis, Missouri,

May, 2007.

- Attended Joint Statistical Meeting (JSM), Seattle, Washington, August, 2006.
- Attended ENAR Spring Meeting, Tampa, Florida, March, 2006.
- Volunteered in the 5th International Objective Bayesian Conference, Branson, Missouri. June, 2005.
- Volunteered in the Conference “New Development of Statistical Analysis in Wildlife, Fisheries, and Ecological Research” (the 5th Winemiller Symposium), Columbia, Missouri, October, 2004.

AWARDS:

- Superior Graduate Student Achievement Award, 2006-2007.
University of Missouri-Columbia.
- Graduate Student Travel Award, 2007. University of Missouri-Columbia.

PROFESSIONAL MEMBERSHIPS:

- Member of Institute of Mathematical Statistics.
- Member of American Statistical Association.
- Member of International Biometric Society (East Northern American Region).
- Member of International Chinese Statistical Association.

COMPUTER SKILLS:

- Operation platform: Windows, UNIX.
- Programming language: Fortran, R/S-Plus, Matlab.
- Statistical/ mathematical software: SAS, SPSS, Minitab, Mathematica.
- Text Formatting: LaTeX, Word, PowerPoint.

COURSE HIGHLIGHTS:

Theoretical:

- Bayesian Statistics.
- Advanced Bayesian Methodology.
- Mathematical Statistics I & II.
- Advanced Probability.
- Theory of Linear Models.
- Advanced Linear Models.
- Stochastic Processes (taken in China).

Applied:

- Data Analysis I & II.
- Applied Spatial Statistics.
- Advanced Spatial Analysis.
- Categorical Data Analysis.
- Multivariate Analysis.
- Data Mining.
- Survival Analysis.
- Bioinformatics.
- Statistical Consulting.

Computing:

- Statistical Software and Data Analysis (SAS, R).
- Topic Course: Simulation and Computation Techniques Using S-Plus.
- Advanced Topic in Statistical Computation and Simulation.

REFERENCES:

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