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Degrees

2006 Ph.D., Statistics, North Carolina State University
2002 M.S., Statistics, Oklahoma State University
1997 B.S., Mathematical Statistics, Nankai University, P. R. China

Professional Experience

2006 – present *Assistant Professor*, Department of Statistics, The University of South Carolina
2005 – 2006 *Research Assistant*, Department of Statistics, North Carolina State University
2003 – 2005 *Graduate Industrial Trainee*, Statistical Science in North America,
GlaxoSmithKline, Research Triangle Park, NC
2002 *Teaching Assistant*, Department of Statistics, North Carolina State University
2001 – 2002 *Research Assistant*, Department of Statistics, Oklahoma State University
2000 – 2002 *Teaching Assistant*, Department of Statistics, Oklahoma State University
1997 – 2000 *Lecturer*, Department of Mathematics, Tianjin Polytechnic University, P. R. China
1997 *Statistical Intern*, Training Department, National Statistical Bureau, P. R. China

Honors and Awards

2010 Travel expenses to attend SAMSI Workshop
2008 Travel expenses to attend Workshop for Junior Researchers at ENAR Spring Meetings
2007 Travel expenses to attend SAMSI Workshop
2005 International Biometric Society (ENAR) Distinguished Student Paper Award
2002 Outstanding M.S. Graduate in Statistics, Oklahoma State University
2002 Elected the Student Membership in American Statistical Association,
Department of Statistics, Oklahoma State University
2000 First Prize in Presentation Contest, Tianjin Polytechnic University, P. R. China
1996 Single-Phase Scholarship, Nankai University, P. R. China

Publications

Huang, X. (2011). Detecting random-effects model misspecification via coarsened data. *Computational Statistics and Data Analysis* **55**, 703–714.

Huang, X. (2009). An improved test of latent-variable model misspecification in structural measurement error models for group testing data. *Statistics in Medicine* **28**, 3316–3327.

Huang, X., Stefanski, L. A., and Davidian, M. (2009). Latent-model robustness in joint models for a primary endpoint and a longitudinal process. *Biometrics* **65**, 719–727.

Huang, X. and Tebbs, J. M. (2009). On latent-variable model misspecification in structural measurement error models for binary response. *Biometrics* **65**, 710–718.

Huang, X. (2009). Diagnosis of random-effect model misspecification in generalized linear mixed effects models for binary response. *Biometrics* **65**, 361–368.

Huang, X., Stefanski, L. A., and Davidian, M. (2006). Latent-model robustness in structural measurement error models. *Biometrika* **93**, 53–64.

Manuscripts in Review

Huang, X. Specification tests for linear mixed models using missing-data intervention. *Biometrika*, first revision in review.

Huang, X. Semi-nonparametric isotonic regression. *Biometrics*, in review.

Huang, X. and Zhang, H. Score-based variable selection and calibration in linear measurement error models. *Biometrics*, in review.

Zhang, H., **Huang, X.**, Gan, J., Karmaus, W., and Sabo-Attwood, T. Bayesian adaptive calibration and variable selection in linear measurement error models. *Statistics in Medicine*, in review.

Funded Grant

National Science Foundation. “Informative model specification tests using coarsened data” (DMS-1006222). **Role: PI.** Funded at: \$104,866. Funding timeline: 09/2010–09/2013.

Unfunded Grant

University of South Carolina. Research Opportunity Program. “Regression analysis of group testing data with measurement error”. **Role: PI.** Submitted 12/2006. Requested amount: \$7,100.

Presentations

“Model specification tests using coarsened data”. Invited talk at SRCOS Summer Research Conference, McCormick, SC. June, 2011.

“Informative specification tests”. Invited seminar at the Department of Biostatistics, Medical University of South Carolina. February, 2011.

“Semi-nonparametric smooth isotonic regression”. Seminar at the Department of Statistics, University of South Carolina. February, 2011.

“An improved test for latent-variable model misspecification in structural measurement error models for group testing data”. Contributed talk at Joint Statistical Meetings, Vancouver, Canada. August, 2010.

“Informative model specification test using coarsened data”. Contributed talk at ENAR Spring Meetings, New Orleans, LA. March, 2010.

“Constructive data destruction: specification tests using coarsened data”. Invited seminar at the Department of Statistics, University of South Carolina. November, 2009.

“Less can help: A counterintuitive concept of fully utilizing data”. Seminar at the Department of Statistics, University of South Carolina. October, 2009.

“Information-reduction diagnostic methods for latent variable models”. Invited seminar at the Department of Epidemiology and Biostatistics, University of South Carolina. April, 2009.

“Detecting model misspecification via information reduction strategies”. Invited seminar at the Department of Statistics, University of Georgia. March, 2009.

“Diagnosis of random-effect model misspecification in GLMM”. Contributed talk at ENAR Spring Meetings, Arlington, VA. March, 2008.

Contributed Presentations

“Measurement error models in shape analysis”. Joint Statistical Meetings, Miami, Florida. August, 2011. Oral presentation by Jiejun Du.

“Measurement error models in shape analysis”. SRCOS Summer Research Conference, McCormick, SC. June, 2011. Poster presentation by Jiejun Du.

“Shape analysis and measurement error”. Department of Statistics at The University of South Carolina. October, 2010. Oral presentation by Jiejun Du.

“Measurement error models in shape analysis”. SAMSI workshop, Research Triangle Park, NC. September, 2010. Poster presentation by Ian Dryden.

“Measurement error models in shape analysis”. Joint Statistical Meetings, Vancouver, Canada. August, 2010. Poster presentation by Jiejun Du.

Student Direction

Jiejun Du, Ph.D. (in progress). Co-advise with Ian Dryden. Topic on measurement error models for shape data.

Ryan M. Orr, Ph.D. (in progress). Topic on model specification tests.

Other graduate committees: 3 Ph.D., 6 M.S.

Course Development

Latent Variable Models (STAT 718A). This is a new course I created and taught for the first time in Spring 2011. This course serves as an elective for the Ph.D. program in Statistics.

Teaching

Course	Semester	No. of Students
STAT 201 Elementary Statistics	Fall 2007	47
SCHC 312A Proseminar in Statistics	Spring 2007, 2008	34
STAT 509 Statistics for Engineers	Spring 2010	46
STAT 515 Statistical Methods I	Fall 2006, 2007; Spring 2007, 2008, 2009	168
STAT 712 Mathematical Statistics I	Fall 2008, 2009, 2010	39
STAT 713 Mathematical Statistics II	Spring 2009, 2010, 2011	38
STAT 718A Latent Variable Models	Spring 2011	12

Professional service

Member. ENAR Student Paper Awards Committee, 2010–2012

Reviewer. Artificial Intelligence and Statistics (AISTATS) 2011 conference

Session chair. Joint Statistical Meetings, 2010.

Session chair. Nonparametric Conference, 2007.

Referee for

- American Statisticians
- Biometrics
- Communications in Statistics (Theory and Methods)
- Computer Methods and Programs in Biomedicine
- Eastern Journal of Medicine
- Journal of American Statistical Association
- Journal of the Royal Statistical Society (Series C)
- Scandinavian Journal of Statistics
- Statistica Sinica
- Statistics and Probability Letters
- Statistical Science

Department service

- Chair. Computer Committee. 2009 – present
- Member. Graduate Program Committee. 2007 – 2009
- Member. Qualifier Exam Committee. 2007 – present
- Member. Course Development Committee (STAT 704, 705). 2006 – 2007
- Member. Conference Organizing Committee (Nonparametric Conference 2007). 2006 – 2007
- Member. Computer Committee. 2006 – 2009
- Library representative. 2006 – 2008

Professional Organizations

American Statistical Association

International Biometric Society (ENAR)