

XIAOYI JI ASSISTANT PROFESSOR

Department of Mathematics
Utah Valley University
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EDUCATION

<i>PhD in Mathematics with a Specialization in Statistics</i> Texas Tech University, Lubbock, USA	May 2008
<i>MS in Statistics</i> Stephen F. Austin State University, Nacogdoches, USA	July 2014
<i>BS in Mathematics</i> Hubei Education University, Wuhan, China	July 1989
<i>Diploma in Mathematics</i> Yichang Normal College, Yichang, China	July 1983

PROFESSIONAL POSITIONS

- Associate Professor, *Utah Valley University, USA*. Fall 2014 to present
- Assistant Professor, *Utah Valley University, USA*. Fall 2008 to 2014
- Teaching Assistant, *Texas Tech University, USA*. Fall 2004 to Spring 2008
- Research Assistant, *Stephen F. Austin State University, USA*. Fall 2002 to Spring 2004
- Real Estate Appraiser, *Real Estate Institute of Tsinghua University, China*. 1996 to 2000
- Instructor, *Yuanan Teacher Education College, Yuanan, China*. Fall 1983 to Spring 1987

TEACHING PROFILE

- **Utah Valley University**
 - MATH 100R – Math Leap
 - MATH 1030 – Quantitative Reasoning
 - MATH 1050 – College Algebra
 - MATH 1100 – Business Calculus
 - MATH 1210 – Calculus I
 - MATH 1220 – Calculus II
 - MATH 2210 – Calculus III
 - MATH 2270 – Linear Algebra
 - MATH 3040 – Mathematical Statistics for Engineers and Scientists

MATH 4040 – Probability and Statistics for secondary teacher
STAT 1040 – Introduction to Statistics
STAT 2040 – Principles of Statistics
STAT 2060 – Introduction to Statistical Computing
STAT 4100 – Design of Experiment
STAT 4400 – Multivariate Analysis
STAT 4710 – Mathematical Statistics I
STAT 4720 – Mathematical Statistics II

SCHOLARSHIP PROFILE

• Refereed Publications

1. Xiaoyi Ji. “Data-Driven Learning Strategy in Introductory Statistics Courses” *IASE-Conference Proceeding: ICOTS 10* 2018.
2. Xiaoyi Ji. “Normal Inverse Function in Teaching Inference about Population Mean and Population Proportion” *IASE-Conference Proceeding: ICOTS 9* 2014.
3. Edward Allen and Xiaoyi Ji. “A Stochastic Partial Differential Equation for Stock-price Distributions.” *Proceedings of Neural, Parallel, and Scientific Computations* 4 (2010) 19-25.
4. Gilliam. D., T. Hohage, Xiaoyi. Ji, and F. Ruymgaart. “Fréchet-Derivatives of Analytic Functions of Compact Operators and Applications.” *International Journal of Mathematical Analysis and Applications. Volume* 2009, Article ID 239025, 17 pages.
5. B. Du, Xiaoyi Ji, R.D. Harmel, and L.M. Hauck. “Using Watershed-Scale Flow Predictions Based on Sparse Data to Develop Flow Duration Curves.” *Journal of the American Water Resources Association* 2009, Volume 45, pp 475-484.
6. Xiaoyi, Ji and F. Ruymgaart. “Frechet-Differentiation of Functions of Operators with Application to Testing the Equality of Two Covariance Operators.” *Journal of Physics: Conference Series* 124 (2008) 012028.
7. B. Du, L.M. Hauck, Xiaoyi Ji. “Using SWAT to Provide Hydrologic Data for a Bacteria TMDL in Upper Oyster Creek, Texas.” *Proceedings of Fourth conference on watershed management to meet water quality and TMDLs issues: solutions and impediments to watershed management and TMDLs* 2007, Crowne Plaza.

• Presentations

1. The tenth international conference on Teaching Statistics in Kyoto, Japan on 8-13 July 2018.

Title: Data, Statistical Thinking and Problem-Solving Driven Teaching Methods in Introductory Statistics

2. The Ninth International Conference on Teaching Statistics July, 2014, Flagstaff, Arizona
Title: The Quantiles of the Distribution of the Specified Random Variable for Inference about Population Means or Population Proportions.
3. MAA Intermountain section conference, April 8-9 2011, Cedar City, Utah.
Title: Investigation on mathematics teaching methods based on my teaching experiences in China and the U.S.”
4. 37th AMATYC Annual Conference, November 11, 2011, Austin, Texas.
Title: Investigation of Mathematics Teaching to Understand the Difference of Public Mathematics Education between the U.S. and China
5. International Conference on Applied Inverse problems: Theoretical and computational aspects, June 25-29, 2007, Vancouver, Canada.
Title: Fréchet-Derivatives of Analytic Functions of Compact Operators and Applications.

SERVICE PROFILE

- **Service to the Department committee**

1. Served the Course development committee that developed the courses for statistics major fall 2011 to spring 2012.
2. Serve the Mathematics Scholarship Committee, Fall 2010-present.
3. Served the department statistics faculty hiring committee, March-August 2011.
4. Served on traffic counts project for UVU Traffic Flow that was organized by the Transportation Division of the city of Orem and the UVU Department of Mathematics in 2010.

- **Service to the Department Activities**

5. Helped with the Utah State Math Contest for high school students on March 17, 2009, March 2010, and March 2011.
6. Helped to select the students with mathematics and mathematical education majors to receive scholarships, May 5, 2010, May 5, 2011, May 1-7, 2012, and May 11-17, 2013.
7. Helped with the adjunct faculty screening. Interviewed two adjunct applicants in their 20 minute-lecture presentation, July, 2009.
8. Helped with the adjunct faculty screening. Interview two adjunct faculties in their 30 minutes lecture presentation, Mar 11, 2011 & Aug 2, 2011.

9. Helped with the adjunct faculty screening. Interview three adjunct faculties in their 30 minutes lecture presentation, February 3, 2012 & July 17, 2012.

- **Service to the University**

10. Served the University Faculty Senate, Fall 2011 to Spring 2013.

11. Served as a judge for the Sterling Scholar competition of Southeastern Utah on March 2, 2010.

12. Served as a judge for the Sterling Scholar Competition in the Central Utah Region on March 12, 2012.

13. Helped with the 23rd, 24th, and 25th Annual Expanding Your Horizons Conference on March 11, 2009, March 6, 2010, and March 2011.