XIAOMU HU
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EDUCATION

1993	Ph.D.	Statistics, University of Missouri-Columbia
1982	B.S.	Mathematics, Jiangxi Polytechnic University, China

PROFESSIONAL APPOINTMENTS

2013 - Present	Professor, Wichita State University
2000 - 2013	Associate Professor, Wichita State University
1994 - 2000	Assistant Professor, Wichita State University
1993 - 1994	Visiting Assistant Professor, University of South Carolina
1987 - 1989	Visiting Scholar, University of Missouri
1982 - 1987	Teaching Assistant, Jiangxi Polytechnic University, China

AREAS OF RESEARCH

Multivariate Order Restricted Inference
Statistical computation and algorithms
Convex Optimization

PHD STUDENTS

Yufei Wang	2019	Stochastic monotonicity of a distribution family associated with matrix projections and its applications
Mustafa Handam	2017	Unbiasedness of homogeneity test of normal mean under multivariate order restrictions
Arijit Banerjee	2012	Testing homogeneity of a parameter matrix some of the rows which are under synchronized order restrictions
Elizabeth Clarkson	2010	Equivalence testing the mean vectors of multivariate normal populations

PUBLICATIONS

- Xiaomi Hu & Yufei Wang (2020), Stochastic monotonicity of of a distribution family associated with matrix projections and its application, *Communications in Statistics - Theory and Methods*, online on Aug 5, 2020 at https://doi.org/10.1080/03610926.2020.1801734

- Xiaomi Hu (2020), A pseudo restricted MLE under multivariate order restrictions and its algorithm, *Communications in Statistics - Theory and Methods*, **49** (1) 169-177.

- Mustafa Hamdan & Xiaomi Hu (2019), Unbiasedness of LRT on the homogeneity of means in MANOVA under general order restrictions, *Statistics and Probability Letters*, **148** 59-65.

- Xiaomi Hu (2016), On an ad hoc test for order restricted multivariate normal means, *Communications in Statistics-Theory and Methods*, **45** (5) 1501-1507.

- Xiaomi Hu and Arijit Banerjee (2012), On the test for the homogeneity of a parameter matrix with some rows constrained by synchronized order restrictions, *the Journal of Multivariate Analysis*, **107** 64-70.

- Xiaomi Hu, Jürgen Hansohm, Linda Hoffmann and Ye Emma Zohner (2012), On convergence of row-modification algorithm for matrix projections, *The Journal of Multivariate Analysis*, **105** 216-221.

- Jüren Hansohm and Xiaomi Hu (2012), A convergent algorithm for a generalized multivariate isotonic regression problem, *Statistical Papers*, **53** 107-115.

- Xiaomi Hu (2009), p-values of a test on homogeneous means in a multivariate isotonic regression, *Statistics and Probability Letters*, **79** (19) 2005-2011.

- Xiaomi Hu and Jürgen Hansohm (2008), Merge and chop in the computation for isotonic regressions, *Journal of Statistical Planning and inference*, **138** (10) 3099-3106.

- Xiaomi Hu (2008), A three-condition characterization of the Moore-Penrose generalized inverse, *The American Statistician*, 62 (3) 216-218.

- Xiaomi Hu (2007), Asymptotical distributions, parameters and coverage probabilities of tolerance limits, *Computational Statistics and Data Analysis*, **51** (9) 4753-4760.

- Xiaomi Hu (2007), Multivariate analysis without *vec* and $\otimes$, *The American Statistician*, **61** (1) 64-66.

- Xiaomi Hu (2006), Unbiasedness on rays of the tests of locations of homogeneous means in isotonic regression, *Statistics and Probability Letters*, **76** (10) 976-980.

- Xiaomi Hu (2006), Approximation of partial distribution in renewal function calculation, *Computational Statistics and Data Analysis*, **50** (6), 1615-1624.

- Xiaomi Hu and Hari Mukerjee (2002), Constructing all extremes of contingency tables with given marginals, *Journal of Computational and Graphical statistics*, **11** (4) 910-919.

- Xiaomi Hu, Subhash C. Kochar, Hari Mukerjee and Francisco J. Samaniego (2002), Estimation of two ordered mean residual life functions, *The Journal of Statistical Planning and Inference*, **107** (1-2), 321-341.

- Xiaomi Hu (2000), Tests for monotonic intensity in a Poisson process, *Australian and New Zealand Journal of Statistics*, **42** (3), 359-365.

- Xiaomi Hu (1999), Application of the limit of truncated isotonic regression in optimization subject to isotonic and bounding constraints, *Journal of Multivariate Analysis*, **71** 56-66.

- Xiaomi Hu (1998), An exact algorithm for projection onto a polyhedral cone, *Australian and New Zealand Journal of Statistics*, **40** (2), 165-170.

- Xiaomi Hu (1997), Maximum-likelihood estimation under bound restriction and order and uniform bound restrictions, *Statistics and Probability Letters*, **35** (2) 165-171.

- Xiaomi Hu (1995), A note on the symmetry of normal mean hypotheses and its implications, *Statistics and Probability Letters*, **25** (1) 15-20.

- Xiaomi Hu and Farroll T. Wright (1994), Monotonicity properties of the power functions of likelihood ratio tests for normal mean hypotheses constrained by a linear space and a cone, *The Annals of Statistics*, **22** (3) 1547-1554.

- Xiaomi Hu and Farroll T. Wright (1994), Likelihood ratio tests for a class of non-oblique hypotheses, *The Annals of The Institute of Statistical Mathematics*, **46** (1) 137-145.

- Xiaomi Hu (1987), B-generating class of ring and the extension of measure on it, *Journal of Jiangxi Polytechnic University*, No 1, 1987

- Xiaomi Hu (1986), Splitting of Linear Model, *Journal of Jiangxi Polytechnic University*, No 2, 1986

- Xiaomi Hu (1985), Non-normal equations representing least square solutions, *Journal of Jiangxi Polytechnic University*, No 3, 1985

PRESENTATIONS

- Xiaomi Hu, A pseudo restricted MLE under multivariate order restrictions, 3rd International Statistics Conference, the Institute of Applied Statistics Sri Lanka, Colombo, Sri Lanka, Dec. 28, 2017.

- Xiaomi Hu, Generalized inverses and matrix spaces, International Workshop on Matrices and Statistics 2015, Haikou, China, May 27, 2015.

- Xiaomi Hu, Order restricted multivariate two-sample problems, Cones and Projections in $R^{p \times 2}$, International Workshop on Matrices and Statistics 2013, Toronto, Canada, Aug. 14, 2013.

- Xiaomi Hu, On the computations of A-basis and B-basis, Quality and Productivity Research Conference 2013, Niskayuna, NY, June 5, 2013.

- Xiaomi Hu, Method selection for computing A-basis and B-basis, IMS/ASA (Institute of Mathematical Statistics/American Statistical Association) Spring Research Conference, Cambridge, MA, June 13, 2012.

- Xiaomi Hu, An algorithm for multivariate isotonic regression, invited talk at the International Indian Statistical Association (IISA) Conference on Probability, Statistics, and Data Analysis, Raleigh, NC, April 22, 2011.

- Xiaomi Hu, On the test for the homogeneity of a parameter matrix with some rows constrained by synchronized order restrictions, the 19th International Workshop on Matrices and Statistics, Shanghai, June 6, 2010.

- Xiaomi Hu, A test of homogeneity versus isotonicity for parameter matrix in a multivariate regression model and its p-values, The first Institute of mathematical Statistics Asia Pacific Rim Meeting, Seoul, South Korea, July 1, 2009

- Xiaomi Hu, Merge and chop in the computation for isotonic regressions, The ICSA (International Chinese Statistical Association) Applied Statistics Symposium, Piscataway, NJ, June 7, 2008

- Xiaomi Hu, Asymptotical distributions, parameters and coverage probabilities of tolerance limits, Conference "Statistics under one umbrella", Bielefeld, Germany, March 28, 2007

- Xiaomi Hu, Approximation of partial distribution in renewal function calculation, 13th INFORMS Applied Probability Conference, Ottawa, Canada, July 7, 2005

- Xiaomi Hu, Unbiasedness on rays of the tests of locations of homogeneous means in isotonic regression, The 6th ICSA (International Chinese Statistical Association) International conference, Singapore, July 11, 2004

- Xiaomi Hu, Data reduction on partial parameters in regression, International Workshop on Matrices and Statistics, Dortmund, Germany, Aug. 8, 2003

- Xiaomi Hu, Inferences on the isotonic intensities of non-homogeneous Poisson processes, International Conference on Applied Statistics, Actuarial Science & Financial Mathematics, Hong Kong, Dec. 17, 2002

- Xiaomi Hu, Test of norm bounded and order restricted normal mean, The Second International Congress of Chinese Mathematicians, Taipei, Taiwan, Dec. 20, 2001

- Xiaomi Hu and Hari Mukerjee, Constructing all extremes of contingency tables with given marginals, 14th Midwest Conference on Combinatorics, Cryptography and Computing, Wichita, Oct. 28, 2000

- Xiaomi Hu, A note on the inferences for Poisson process, 5th World Congress of the Bernoulli Society for Mathematical Statistics and Probability and 63rd Annual Meeting of the Institute of Mathematical Statistics, Guanajuato, Mexico, May 18, 2000

- iaomi Hu, Order and bound restricted MLEs and universal domination, American Statistical Association and the Institute of Mathematical Statistics Joint Statistical Meeting, Dallas, Aug. 13, 1998

- Xiaomi Hu, Estimation under order and uniform bound restricted parameter spaces, IMS Central Regional Meeting, Iowa City, May 17, 1995