One Paragraph Biosketch: Liang Peng

Dr. Peng has been the Thomas P Bowles chair professor of actuarial science in the department of Risk Management and Insurance in the Robinson College of Business at Georgia State University since August 2014. He was a faculty in the School of Mathematics at Georgia Institute of Technology from January 2001 to August 2014, and was promoted to associate professor with tenure in 2006 and to full professor in 2009. Since January 2018, Dr Peng has been the RMI PhD program coordinator. Dr Peng has been lucky to be able to work with very top researchers in statistics and econometrics. So far he has published one book on heavy tailed data analysis and 140 papers in various journals in statistics, econometrics and actuarial science including Journal of Econometrics, Journal of Business and Economic Statistics, Econometric Theory, Econometric Reviews, North American Actuarial Journal, Scandinavian Journal of Actuarial, Insurance: Mathematics and Economics, ASTIN Bulletin, Annals of Statistics, Journal of American Statistical Association, Biometrika, Journal of Royal Statistical Society Series B, Statistical Science, Annals of Applied Statistics, and Statistica Sinica. His research has been funded by NSF, NIH, NSA, the Society of Actuaries and Simons Foundation. He received his Ph.D. in 1998 from Erasmus University Rotterdam in the Netherlands, won the Alexander von Humboldt Research fellowship in 2005 and became an elected fellow of Institute of Mathematical Statistics in 2009 and an elected fellow of American Statistical Association in 2012. Currently he is an associate editor of the Journal of American Statistical Association, Statistica Sinica and Scandinavian Journal of Statistics, and was an associate editor of Annals of Statistics, Extremes and several other journals. His resume and a list of publications are available at: http://sites.gsu.edu/lpeng

Curriculum Vitae: Liang Peng

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Education:

Ph.D. in mathematical statistics at Erasmus University Rotterdam. Supervisor: Professor Laurens de Haan. Time: November 1, 1993 – June 25, 1998. Ph. D. Thesis: **Second Order Condition and Extreme Value Theory.** *Tinbergen Institute Research Series 178, Thesis Publisher, Amsterdam, 1998.*

M.S. in probability at Peking University. Supervisor: Professor Shihong Cheng. Time: September 1, 1990 – July 1, 1993.

B.S. in mathematics at Zhejiang University. Time: September 1, 1986 – July 1, 1990.

Professional Experience:

August 2016 – : Adjunct Professor in the Department of Mathematics and Statistics at Georgia State University

August 2014 – : Thomas P Bowles Chair Professor of Actuarial Science in the Department of Risk Management and Insurance in the Robinson College of Business at Georgia State University

January 2016 – December 2020: Adjunct professor in the School of Mathematics at Georgia Institute of Technology

August 2009 – August 2015: Professor in the School of Mathematics at Georgia Institute of Technology

August 2006 – August 2009: Associate professor in the School of Mathematics at Georgia Institute of Technology

January 2006 – May 2006: Assistant professor in the Department of Statistics at Iowa State University

January 2001 – August 2006: Assistant professor in the School of Mathematics at Georgia Institute of Technology

August 2000 – December 2000: Visiting assistant professor in the Department of Mathematics at The Hong Kong University of Science and Technology, Hong Kong

September 1998 – July 2000: Postdoctoral research fellow under the supervision of Professor Peter Hall in the Center for Mathematics and its Applications at Australian National University, Australia.

November 1993 – June 1998: Research assistant in the Tinbergen Institute at Erasmus University Rotterdam, The Netherlands.

Awards:

[4] 2017 RCB Faculty Recognition Award for Distinguished Contributions in Research.

[3] ASA Fellow (elected 2012).

[2] IMS Fellow (elected 2009).

[1] Humboldt Research Fellowship (July – December, 2005).

Journal Papers:

[149] Q. Liu, C. Ling, D. Li and L. Peng (2018). Bias corrected inference for modified Lee-Carter mortality model. ASTIN Bulletin. To appear.

[148] H. Huang, L. Peng and V. Yao (2018). Comovements and asymmetric tail dependence in state housing prices in US: a nonparametric approach. Journal of Applied Econometrics. To appear.

[147] V. Asimit, L. Peng, R. Wang and A. Yu (2019). An efficient approach to quantile capital allocation and sensitivity analysis. Mathematical Finance. To appear.

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[142] R. Zhang, C. Li and L. Peng (2019). Inference for the tail index of a GARCH(1,1) model and an AR(1) model with ARCH(1) errors. Econometric Reviews. To appear.

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Scandinavian Actuarial Journal 5, 325–339.

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Discussions and Book Chapters:

[6] Z. Zhang, L. Peng and T. Idowu (2016). Max-autoregressive and moving maxima models for modeling extremes. In: Extreme Value Modeling and Risk Analysis: Methods and Applications, edited by Dey and Yan.

[5] L. Peng and Z. Zhang (2013). Statistics of Spatial Extremes II: Nonstationary Modeling. Encyclopedia of Environmetrics (2nd edition).

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Submitted Papers:

X. Liu, B. Yang, Z. Cai and L. Peng (2018). Unified tests for a dynamic predictive regression.

H. Huang, X. Leng, X. Liu and L. Peng (2018). Unified inference for an AR process with possible infinite variance GARCH errors. Journal of Financial Econometrics. Revision.

Y. He, Y. Hou, L. Peng and H. Shen (2018). Inference for conditional Value-at-Risk of a predictive regression. Journal of Business and Economic Statistics. Revision.

S. Kang and L. Peng (2018). Two-step inference in insurance ratemaking.

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Books:

Liang Peng and Yongcheng Qi (2017). Inference for Heavy Tailed Data Analysis: Applications to Insurance and Finance. *Elsevier.*

Grants:

[18] SOA's CAE grant (Co-PI, PI is Daniel Bauer); 2015–2017; Society of Actuaries; Amount $150,000.

[17] Longevity Pooling-Identifying and Measuring the Impact (PI, Co-PI is Daniel Bauer); 07/01/2015–12/31/2016; Society of Actuaries; Amount $25,000.

[16] CEAR grant in the Robinson College of Business at Georgia State University; 06/01/2015–12/31/2015; Amount $2,500.

[15] Simons Foundation; 09/01/2014–8/30/2019; Amount $35,000.

[14] Participant support for the 8th conference on extreme value analysis (with Richard Smith, Zhengjun Zhang); 06/15/13–06/14/14; NSF DMS-1258701; Amount $10,000.

[13] Interval Estimation for Elliptical Copulas in Risk Management (with Jingping Yang); 09/2011–08/2013; The Actuarial Foundation; Amount $20,000.

[12] Collaborative Research: Reducing Computation in Empirical Likelihood Methods; 09/01/2010–08/30/2013; NSF DMS-1005336; Amount $160,000.

[11] Empirical Likelihood and Jackknife Methods for Analyzing Financial Data (Co-PI, PI is Professor Ngai-Hang Chan); 09/01/2010–08/31/2013; HK; Amount HK$750,000.

[10] SCREMS: Scaling up Mathematical Computations (one of four Co-PIs, PI is Professor Lew Lefton); 07/01/2010–06/30/2011; NSF DMS-1026243; Amount $115,000.

[9] Collaborative research: statistical inference based on jackknife empirical likelihood methods; 2010-2011; NSA H98230-10-1-0170; Amount $69,427.

[8] Tail copulas and time-varying tail copulas in risk management and insurance (jointly with Jian Chen and Xiaohong Chen); 06/01/2007 - 05/31/2008; Knowledge Extension Research (CKER) of the Society of Actuaries; Amount $20,000.

[7] Time series models of intra-individual variability (Co-PI, PI is Daniel Spieler from School of Psychology, GT); 10/01/2006 - 09/30/2008; NIH; Amount $65,424 per year.

[6] Collaborative Research: Copulas, Tail Copulas, Garch and Extreme Values in Dependence Modeling and Risk Management (PI); 10/01/2006 - 09/30/2010; NSF SES-0631608; Amount $152,104.

[5] Empirical Likelihood Methods for GARCH Models (Co-PI, PI is Ngai-Hang Chan, Chinese University of Hong Kong); 09/01/2006 – 08/31/2009; HK; Amount HK$550,000.

[4] Statistical Inference for Continuous-Time Stochastic Processes (Co-PI, PI is Songxi Chen, Iowa State University); 08/15/2006 - 07/14/2009; NSF DMS-0604563; Amount $165,018.

[3] Interdisciplinary training for undergraduates in Biological and Mathematical Sciences (one of many Co-PIs); 09/05 - 08/07; NSF; Amount $300,000.

[2] Faculty development grant, College of Science, Georgia Tech.; 07/04 - 07/05; Amount $5,000.

[1] Statistical Inference based on data tilting (single PI); 06/01/04 - 05/31/07; NSF DMS-0403443; Amount $85,578.

Pending Proposals:

REU site: summer research for undergraduates in actuarial science; NSF; Submitted in August.

Predictive regression and risk analytics; SES program in NSF; Submitted in September.

REU site: summer research for undergraduates in actuarial science; NSA; Submitted in October.

Uncertainty quantification for model-based risk analysis; Statistics program in NSF; Submitted in December.

Research Interests:

Actuarial Science

Extreme value theory in insurance and finance

Copulas and tail copula in risk analysis

Financial Econometrics

Heavy tailed nonlinear time series

Nonparametric statistics and empirical likelihood inference

Teaching Experience:

AS4320: Introduction to Stochastic Models. Time: Fall 2018. Place: GSU.

AS4140: Probability and Statistics. Time: Spring 2015, Spring 2016, Spring 2017. Place: GSU.

AS8810: Actuarial Science Graduate Seminar. Time: Spring 2015, Fall 2015, Spring 2017, Fall 2017, Spring 2018, Spring 2019. Place: GSU.

Econ8780: Financial Econometrics. Time: Fall 2014, Fall 2015, Fall 2016, Fall 2017, Fall 2018. Place: GSU.

MATH6783: Statistical Techniques of Financial Data Analysis. Time: Spring 2010. Place: Georgia Tech.

MATH6781: Reliability Theory. Time: Fall 2008. Place: Georgia Tech.

MATH6266: General Linear Models. Time: Spring 2007. Place: Georgia Tech.

Engineering Statistics. Time: Spring 2006. Place: Iowa State University.

MATH6262: Statistical Estimation. Time: Fall 2003, Spring 2011. Place: Georgia Tech.

MATH6235: Stochastic Processes in Finance II. Time: Fall 2011, Fall 2012. Place: Georgia Tech.

Special topic: Modeling extremal events. Time: Fall 2002, Fall 2004. Place: Georgia Tech.

MATH4262: Mathematical Statistics II. Time: Spring 2002, Spring 2003, Spring 2005, Spring 2007, Spring 2008, Spring 2009, Spring 2010, Spring 2011, Spring13, Spring 2014. Place: Georgia Tech.

MATH4261: Mathematical Statistics I. Time: Fall 2001, Fall 2002, Fall 2004, Fall 2006, Fall 2008, Fall 2009, Fall 2010, Fall 2011, Fall 2012. Place: Georgia Tech.

MATH3215: Introduction to Probability and Statistics. Time: Summer 2001. Place: Georgia Tech.

MATH3770: Statistics and Applications. Time: Spring 2001, Summer 2001, Summer 2002, Fall 2003, Spring 2005, Summer 2006. Place: Georgia Tech.

Stochastic Processes. Time: September, 2000 – December, 2000. Place: HKUST, Hong Kong

Probability Theory. Time: March 2000 – July 2000. Place: Australian National University.

Committees:

2018–2019: Hiring committee chair in RMI at GSU.

2018–2019: Co-chair RMI Academic Program Review.

September 2017: Committee for internal search of RMI department chair at GSU.

2017–2018: Hiring committee in RMI at GSU.

November 2017: Organizing Bowles Symposium 2017 on predictive analytics and risk analytics at GSU.

2017: Committee member of ARC2017 at GSU.

2017: Ferrer Professorship Search Committee in RCB at GSU.

November 2016: Organizing Bowles Symposium 2016 on systemic risk at GSU.

2016-2017: Hiring committee in RMI at GSU.

2016: Program committee of the American Risk and Insurance Association's annual meeting held in Boston on August 7–10, 2016.

2016: Program committee of the International Symposium on Financial Engineering and Risk Management held in GuangZhou on June 12–13, 2016.

September 2015: P&T committee in RMI at GSU.

2015–2016: Program committee of ICSA 2016 Applied Statistics Symposium to be held in Atlanta on June 12–15, 2016.

2015–2016: Scientific committee of IME 2016 to be held in Atlanta on July 24–27, 2016.

August 2015: Zhi Han's Ph.D. defense committee in IsYE at Georgia Tech.

July 2015: Kuang-Chen Hsiao's Ph.D. defense committee at Taiwan National University.

May 2015: Yi Xiao's Ph.D. defense committee in IsYE at Georgia Tech.

2015: Committee for evaluating candidates for two endowed professorships in RMI at GSU.

February 2015: Yi Xiao's Ph.D. Proposal defense committee in IsYE at Georgia Tech.

2015: Committee on Graduate Faculty Status in RMI at GSU.

2015: Committee on Ph.D. program in Data Science in RCB at GSU.

2015: 2CI big data hiring committee in RCB at GSU.

February 2015: P&T committee in RMI at GSU.

January 2015: Ph.D. defense committee of Allen Hoffmeyer in the School of Mathematics at Georgia Tech.

August 2014–July 2015: MSA curriculum committee in RCB at GSU.

August 2014–July 2015: hiring committee chair for tenure-track positions in actuarial science in RMI at GSU.

2014–2015: Scientific committee of the 9th international conference on Extreme Value Analysis at University of Michigan, June 15–19, 2015.

June 2014: Ph.D. defense committee of Kun Chen at Chinese University of Hong Kong.

March 2014: Ph.D. oral exam committee of Dong Xia in SoM at Georgia Tech.

July 2013: Organizing and scientific committees of Extreme Value Analysis 2013 at FuDan University, China.

September 2012–August 2014: Executive committee of QCF at Georgia Tech.

August 2013: Ph.D. proposal committee of Zhi Han in ISYE at Georgia Tech.

March 2013: Ph.D. defense committee of Kai Ni in SoM at Georgia Tech.

July 2012: Organizing committee of the International Conference on Quantitative Finance and Risk Management at Jilin University, China.

May 2012: Ph.D. defense committee of Huy Huynh in SoM at Georgia Tech.

October 2011: Ph.D. defense committee of Syed Ali Hassan in ECE at Georgia Tech.

August 2011–July 2013: Junior Promotion and Tenure committee at Georgia Tech.

January 2011–December 2013: Board of directors of the International Chinese Statistics Association.

2009-2012: QCF Executive Committee at Georgia Tech.

April 2011: Ph.D. defense committee of Heeyoung Kim in IsYE at Georgia Tech.

November 2010: Ph.D. defense committee of Ke Zhu at Hong Kong University of Science and Technology.

November 2010: Oral exam committee of Giang H Do in School of Mathematics at Georgia Tech.

2008-2010: Faculty Advisory Committee in School of Mathematics at Georgia Tech.

2008: Program committee for EVA 2009 on June 22 - 26 in Fort Collins, Colorado.

2008: Program committee for 2009 ICSA Applied Statistical Symposium on June 21 - 24 in San Francisco, California.

November 2008: PH.D. defense committee of Kun Shi in ECE at Georgia Tech.

January 2007: the best MS thesis committee for the Sigma Xi Georgia Tech awards.

August 2006 – August 2007: QCF Executive Committee at Georgia Tech.

March 2006: Ph.D. defense committee of Krassimir Kolev Kostadinov at Munich University of Technology.

November 2005: Ph.D. defense committee of Xuelei Ni in IsYE at Georgia Tech.

Spring 2005: QCF senior faculty search committee at Georgia Tech.

June 2005: Oral exam committee of Wen Jiang in SoM at Georgia Tech.

May 2005: Thesis proposal committee of Zhengdong Xia in IsYE at Georgia Tech.

May 2005: Oral exam committee of Trevis Litherland in SoM at Georgia Tech.

April 2005: Thesis proposal committee of Xuelei Ni in IsYE at Georgia Tech.

April 2004: Thesis proposal committee of Sashidha Dandamud in IsYE at Georgia Tech.

March 2004: Ph.D. defense of Hyoungtae Kim in IsYE at Georgia Tech.

October 2003: Ph.D. defense of Suk Joo Bae in IsYE at Georgia Tech.

2002-2003: Faculty Advisory Committee in School of Mathematics at Georgia Tech.

January 2003: Thesis proposal committee of Hyoungtae Kim in IsYE at Georgia Tech.

December 2002: Thesis proposal committee of Suk Joo Bae in IsYE at Georgia Tech.

June 2002: Thesis proposal committee of Michael D. Swinson in ME at Georgia Tech.

Editorial boards:

2017 – 2020: Associate editor of Journal of American Statistical Association

February 2014–January 2020: Associate editor of Scandinavian Journal of Statistics

August 2011–July 2020: Associate editor of Statistica Sinica

January 2014–December 2018: Associate editor of Journal of Mathematical Studies

2012–December 2013: Associate editor of Statistics and Probability Letters

October 2010–September 2013: Associate editor of Statistics and its Interface

December 2009 –December 2013: Associate editor of Technology and Investment

January 2008 –December 2013: Associate editor of Journal of Korean Statistical Society

August 2007 – December 2009: Associate editor of Annals of Statistics.

January 2007 – December 2014: Associate editor of Extremes.

2006 - 2012: Associate editor of the International Journal of Statistics and Management Systems.

2004 - 2009: Associate editor of the International Journal of Statistics and Systems.

Services:

December 2018: Promotion letter writer for three associate professors and one full professor

September 2018: Tenure and promotion letter writer.

August 2018: Tenure and promotion letter writer.

January 2018–: RMI PhD program coordinator.

August 2017: Tenure letter writer.

July 2017: Tenure and Promotion letter writer.

September 2016: Tenure and Promotion letter writer.

March 2016: Promotion letter writer.

September 2015: Tenure and Promotion letter writer.

August 2015: Tenure and Promotion letter writer.

January 2015: Tenure and Promotion letter writer.

August 2012: Promotion letter writer.

September 2011: Promotion letter writer.

September 2011: Tenure and promotion letter writer.

August 2011: Tenure and promotion letter writer.

October 2010: Tenure and promotion letter writer.

February 2010: Tenure and promotion letter writer.

November 2008: External letter writer for third-year review.

December 2006: External letter writer for third-year review.

August 2006 – April 2007: Run the Georgia Tech Quantitative and Computational Finance (GT QCF) seminar series.

2002-2003: In charge of Stochastic seminar series jointly with Christian Houdre in the School of Mathematics, Georgia Tech.

June 17, 1999–July 31, 2000: In charge of ANU Statistics Seminar Series.

In 2019, referee for Statistics and Probability Letters (one paper)

In 2018, referee for Journal of Risk and Insurance (one paper), Test (two papers), Journal of Econometrics (one paper), Applied Mathematics-A Journal of Chinese Universities (one paper), Insurance: Mathematics and Economics (two papers), Annals of Statistics (one paper), ASTIN-Bulletin (three papers), Managerial Finance (one paper), Journal of Business and Economic Statistics (one paper), Journal of Banking and Finance (one paper), Scandinavian Actuarial Journal (one paper)

In 2017, referee for Statistics and Its Interface (one paper), Journal of Econometrics (one paper), Annals of Applied Statistics (one paper), Insurance: Mathematics and Economics (two papers), Statistical Methods and Applications (one paper), RGC of Hong Kong (three proposals), Test (one paper), Scandinavian Journal of Statistics (one paper), Cambridge University Press (one book), Simons Foundation (proposals for the Collaboration Grants Program), Technometrics(one paper), Annals of Statistics (one paper), Journal of Time Series Analysis (one paper), Yau High School Mathematics Competition (one project), Journal of Statistical Planning and Inference (one paper), Extremes (one paper);

In 2016, referee for Annals of Statistics (one paper), NAAJ (three papers), JASA(two papers), JBES (three papers), Hong Kong RGC (three proposals), IME(three papers), AISM (one paper), Biometrika (one paper), Statistics and its Interface (one paper), Test (one paper), Statistics and Probability Letters (one paper);

In 2015, referee for JRSSB (one paper), JBES (three papers), Statistica Sinica (one paper), JoE (three papers), ASTIN Bulletin (one paper), Hong Kong RGC (four proposals), Computational Statistics and Data Analysis (one paper), Statistics and Its Interface (one paper), Elsevier (one book proposal), Extremes (one paper), Science China Mathematics (two papers), JASA (one paper), NAAJ (one paper), Statistics and Probability Letter (one paper), Scandinavian Journal of Statistics (one paper), AISM (one paper), Communications in Statistics (one paper), Frontiers of Mathematics in China (one paper);

In 2014, referee for JASA (two papers), Journal of Statistical Theory and Practice (one paper), Revstat (one paper), Annals of Statistics (one paper), Advances in Mathematics (one paper), AIMS (one paper), JBES(one paper), Chinese Annals of Mathematics,

Ser B (one paper), CSDA (two papers), Journal of Probability and Statistics (one paper), Technometrics (one paper), JMVA (one paper), Statistical Papers (two papers), Statistics & Probability Letters (one paper), Statistics and its Interface (one paper), start-up program proposal in Canada (one), NSERC (one proposal), Journal of Risk and Insurance (one paper);

In 2013, referee for JMVA (one paper), Test (one paper), Journal of Econometrics (two papers), Journal of Statistical Computation and Simulation (one paper), Communication in Statistics–Theory and Methods (one paper), Scandinavian Journal of Statistics (one paper), Hong Kong RGC (one proposal), Econometric Theory (one paper), Journal of Statistical Planning and Inference (one paper), Statistics & Probability Letters (one paper), Journal of Time Series Analysis (one paper), Annals of Applied Statistics (one paper), Annals of Statistics (one paper), Journal of Business and Economic Statistics (one paper), Bernoulli (one paper), Statistics and Its Interface (two papers), JASA(one paper);

In 2012, referee for Ann. Statist. (two papers), JSPI (three papers), Bernoulli (one paper), NSA (two proposals), Statistics and Probability Letters (one paper); Journal of Statistical Software (one paper); Journal of Nonparametric Statistics (two papers); Computational Statistics and Data Analysis (one paper); JASA (four papers); JMVA (two papers); The American Statistician (one paper); Canadian Journal of Statistics (one paper); Journal of Statistical Computation and Simulation (one paper)

In 2011, referee for JMVA (three papers); Computational Statistics and Data Analysis (one paper); Statistics and Probability Letters (two papers); JSPI (three papers); NSF (one proposal); Journal of Econometrics (two papers); Journal of Applied Econometrics (one paper); Statistica Sinica (one paper); Ann Statist (two papers); Canadian Journal of Statistics (two papers); JASA (two papers); Scandinavian Journal of Statistics (one paper); Test (one paper); Studies in Theoretical and Applied Statistics (one paper); Bernoulli (one paper); Journal of Computational and Graphical Statistics (one paper); Technometrics (one paper)

In 2010, referee for JSPI (three papers); CSDA (one paper); JoE (one paper); Biometrika (one paper); Communications in Statistics (one paper); Statistics and Probability Letters (three papers); Statistica Sinica (one paper); JMVA (one paper); Journal of Applied Probability (one paper); Biometrical Journal (one paper); Australian and New Zealand Journal of Statistics (one paper); Stochastics (one paper); Extremes (one paper); Swiss National Science Foundation (one proposal); Stochastic Models (one paper); Bernoulli (one paper); Journal of computational and Graphical Statistics (one paper)

In 2009, referee for Electronic Journal of Statistics (one paper), NSF (one proposal), JASA (two papers), NSA (one proposal), ESAIM: Probability and Statistics (one paper); Portugalia Mathematics (one paper); NWO (one proposal); Statistica Sinica (one paper); Statistics and Probability Letters (one paper); Environmental and Ecological Statistics (one paper); Journal of Nonparametric Statistics (three papers); JMVA (one paper); CJS (one paper); JSPI (two papers)

In 2008, referee for *Journal of Nonparametric Statistics* (two papers), *JRSSB* (one paper), *NSF* (one proposal), *NSA*(one proposal), *Springer* (one book proposal); *Communication in Statistics - Theory and Method* (one paper); *Stochastic Processes and Their Applications* (one paper); *Extremes* (one paper); *W.H. Freeman Publisher* (one book); *Bernoulli*

(one paper); *Journal of Multivariate Analysis* (one paper)

In 2007, referee for *Journal of Banking and Finance* (one paper); *Biometrika* (one paper); *Journal of Financial Econometrics* (one paper); *Econometric Theory* (one paper); *Statistics & Probability Letters* (one paper); *Extremes* (two papers); *NSF proposal* (one); *Annals of Applied Probability* (one paper); *JASA* (one paper); *JSPI* (one); *Scandinavian Journal of Statistics* (one paper); *Journal of Empirical Finance* (one paper); *Metrika* (one paper); *Bernoulli* (one paper)

In 2006, referee for *Metron* (one paper), *Annals of Statistics* (three papers), *JRSSB* (two papers), *JSPI* (one paper), *Internet Mathematics* (one paper), *Journal of Multivariate Analysis* (two papers), *JASA* (one paper), *Journal of Econometrics* (one paper), *Journal of The Australian Mathematical Society* (one paper), *Statistical Inference for Stochastic Processes* (one paper), *Ann. Inst. Statist. Math.* (one paper)

In 2005, referee for: *JASA* (three papers), *Annals of Statistics* (two papers), *Ann. Inst. Statist. Math.* (one paper), *NFS* (one proposal), *Journal of Econometrics* (one paper), *Journal of Nonparametric Statistics* (one paper), *Statistica Sinica* (one paper), *Bernoulli* (one paper), *Journal of Time Series Analysis* (one paper), *Communications in Statistics - Theory and Methods* (one paper), *Journal of Statistical Computation and Simulation* (one paper), *Econometric Theory* (one paper)

In 2004, referee for: *Annals of Statistics* (three papers), *Scandinavian Journal of Statistics* (one paper), *Journal of Statistical Planning and Inference* (two papers), *Journal of Time Series Analysis* (one paper), *Extremes* (one paper), *Internet Mathematics* (one paper), *Probability Theory and Related Fields* (one paper);

In 2003, referee for: *Extremes* (two papers), *Annals of Statistics* (one paper), *The Annals of Applied Probability* (one paper), *Statistics* (one paper), *Statistica Sinica* (one paper), *IEEE Transactions on Signal Processing* (one paper), *Journal of Statistical Planning and Inference* (one paper), *Statistics and Probability Letters* (one paper), *Biometrika* (one paper); *JASA* (one paper)

In 2002, referee for: *Extremes* (one paper), *Journal of Statistical Planning and Inference* (one paper), *Annals of Statistics* (one paper), *Econometric Theory* (one paper), *Statistics in Medicine* (one paper), *J.R.S.S.B.* (two papers), *Methodology and Computing in Applied Probability* (one paper), *Biometrika* (one paper), *Statistica Sinica* (one paper);

In 2001, referee for: *Statistical Computation & Data Analysis* (two papers), *Statistica Sinica* (one paper), *ESAIM: Probability and Statistics* (one paper), *Econometric Theory* (one paper), *Bernoulli* (once), *Test* (one paper), *Journal of Statistical Planning and Inference* (one paper), *SIAM Journal of Applied Mathematics* (one paper);

Before 2000, referee for: *Statistics & Probability Letters*, *Extremes*, *Australian & New Zealand Journal of Statistics*, *Annals of Statistics*, *Journal of Statistical Planning and Inference*, *Stochastic Processes and their Applications*, *Probability Theory and Related Fields*;

Professional Membership:

IMS: The Institute of Mathematical Statistics (lifetime member & fellow)

ASA: The American Statistical Association (lifetime member & fellow)

ICSA: The International Chinese Statistical Association (lifetime member)

ARIA: American Risk and Insurance Association (December 2016–December 2017)

SOFIE: The Society for Financial Econometrics (December 2016–December 2019)

Programming Languages:

C/C++, S-PLUS, MATLAB, R. Attended the three days' Splus course at CSIRO in Sydney (Feb. 14 - 16, 2000).

Consultancy:

[5] Comerica bank in 2007: computing operational risk.

[4] American Hole 'n One, American Media & Special Promotions in 2006: calculating the small chance of winning a first prize in a game.

[3] Socionomics Foundation in 2006: quantifying the model for predicting stock prices.

[2] IQSTAT in 2003: sampling population for installing devices in their cars.

[1] May 1, 1996 – Feb. 1, 1997: I participated in the European Union project " Neptune" in Erasmus University Rotterdam. This project as a whole aimed at creating a model for transferring extreme conditions in weather patterns onto sea state conditions off-shore and then onto sea state conditions near shore which could threaten coastal areas. Multivariate extreme value theory was used to analyze our data sets.

Doctoral Students:
·Yun Gong, Empirical likelihood and extremes, graduation in December 2011 at Georgia Institute of Technology.
·Ruodu Wang, Some questions in risk management and high dimensional data analysis, graduation in May 2012 at Georgia Institute of Technology.
·Huijun Feng, Goodness-of-fit tests and bilinear model, graduation in December 2012 at Georgia Institute of Technology.
·Chenxue Li, Some novel statistical inferences, graduation in June 2016 at Georgia State University (co-advisor, another co-advisor is Jeff Qin in the Department of Mathematics and Statistics at GSU).
·Yanxi Hou, Statistical inference for some risk measures, graduation in June 2017 at Georgia Institute of Technology (co-advisor, another co-advisor is Xingxing Yu in the School of Mathematics at Georgia Tech).
·Xing Wang, Statistical inference for the Haezendonck-Goovaerts risk measure, graduation in July 2018 at Georgia State University.

Conference or University Visits:

Invited speaker at FERM2018. Time: June 13–June 14, 2018. Place: Fudan University.

Invited speaker at the 31st New England Statistics Symposium. Time: April 21–April 22, 2017. Place: University of Connecticut

Invited speaker at the International Symposium on Financial Engineering and Risk Management. Time: June 12–13, 2016. Place: GuangZhou, China

Invited speaker at the Workshop on high frequency data, network data and relative fields. Time: June 3–5, 2016. Place: Nanjing, China

Invited speaker at the International Workshop on Time Series Econometrics. Time: Dec 18–20, 2015. Place: Tsinghua Sanya International Mathematics Forum (TSIMF), Sanya, Hainan, China

Invited speaker at Recent Advances in Actuarial Mathematics (15w5021). Time: Oct 25–30, 2015. Place: Oaxaca, Mexico

Invited speaker at 2015 International Symposium on Sino-American Risk Management and Insurance. Time: July 10-12, 2015. Place: Cheng Du, China

Invited speaker at 2nd international workshop on frontiers of statistics with application to finance. Time: July 5–7, 2015. Place: Fudan University, China.

Invited speaker at 2015 ICSA China Statistics Conference. Time: July 6–7, 2015. Place: Fudan University, China.

Invited speaker at IMS-China. Time: July 1–4, 2015. Place: Yunnan University, China

Invited speaker at 9th International conference on EVA. Time: June 15–19, 2015. Place: University of Michigan.

Invited speaker at 100 years of CAS. Time: November 9–12, 2014. Place: New York City

Invited speaker at Workshop on Risk Analysis, Ruin and Extremes. Time: July 14–16, 2014. Place: NanKai University, China.

Invited speaker at International Symposium on Financial Engineering and Risk Management 2014 (FERM 2014). Time: June 27–June 28, 2014. Place: Beijing, China.

Invited speaker at 8th Conference in Actuarial Science & Finance on Samos. Time: May 29 - June 1, 2014.

Invited speaker at ICSA 2013. Time: December 20–23, 2013. Place: Hong Kong.

Invited speaker at the statistical conference. Time: December 19, 2013. Place: HKUST.

Visit Taiwan National University. Time: September 2013. Place: TaiBei.

Visit London School of Economics. Time: August 2013. Place: London.

Visit University of Lausanne. Time: August 2013. Place: London.

Speaker at EVA2013 at FuDan University, China. Time: July 2013. Place: ShangHai.

Speaker at JSM, San Diego. Time: July 2012, Place: San Diego.

Invited speaker at the 2012 International Forum on Modern Statistics and Econometrics. Time: July 2012, Place: Xiamen University.

Invited speaker at Workshop on Biostatistics and Bioinformatics. Time: May 2012, Place: Georgia State University.

Invited speaker at Conference on long-range dependence, self-similarity and heavy tails. Time: April 2012, Place: SAMSI

Invited speaker at CFE-ERCIM 2011 in London. Time: December 2011

Organize an invited session on IWEICS 2010 at Xiamen, China. Time: December 2010

Invited speaker at AMS 2009, Baco Raton. Time: October 2009

Invited speaker at SIAM 2008, Orlando. Time: March 2008

Invited speaker at EVA 2007, Bern. Time: July 23 - 27, 2007

Invited speaker at X CLAPEM, Latin American Congress of Probability and Mathematical Statistics, LIMA. Time: February 25 – March 3, 2007

Invited speaker at the workshop, Statistics of Extremes and Environmental Risk, in Lisbon, Portugal. Time: February 15 - 17, 2007.

Visit the Chinese University of Hong Kong. Time: Dec 18 - Dec 24, 2006.

Visit Tongji University, Shanghai. Time: Dec 24 - Dec 28, 2006.

Organize a topic contributed session on statistics of extremes at JSM2006.

Invited speaker at International Chinese Statistical Association - 2006 Applied Statistics Symposium; University of Connecticut; June 14-17, 2006.

Organize an invited session on heavy tail distributions at IWAP2006

Speaker at Joint Statistical Meeting 2005.

Visit the Center for Mathematical Sciences, Munich University of Technology. *Time:* July 2005 - December 2005.

Visit the Department of Mathematics, National Taiwan University. *Time:* Feb 15, 2004 - March 5, 2004.

Visit the Department of Statistics, The Chinese University of Hong Kong. *Time:* December 21, 2003 - January 3, 2004.

Speaker at Bernoulli Society East Asian and Pacific Region Conference 2003. *Time:* December 18 - 20, 2003. *Place:* Hong Kong University of Science and Technology.

Visit EURANDOM, The Netherlands. *Time:* June 2 - July 13, 2003.

Participant in New Researchers' Program at Stanford University. *Time:* August 4 - 16, 2002. (Supported by Department of Statistics, Stanford University via NSF)

Participant in New Researchers' Program at Stanford University. *Time:* August 5 - 18, 2001. (Supported by Department of Statistics, Stanford University via NSF)

Participant in Workshop on Environmental Statistics at University of Washington in Seattle. *Time:* June 25-29, 2001. (Supported by the NSF-CBMS Regional Conference in the Mathematical Sciences)

Invited speaker at the Workshop on Statistical Modelling, Lisbon, Portugal. *Time:* October, 1999.

Speaker at the 4th World Congress of the Bernoulli Society, Vienna. *Time:* May, 1996.

Speaker at the 50th Session of the International Statistical Institute, Beijing. *Time:* August, 1995.

Seminars:

Title: Inference for mortality model and predictive regression. *University of Alabama. Time: March 2018.*

Title: New Robust Econometric Tests for a Dynamic Predictive Regression. *University of Georgia. Time: November 2017.*

Title: Inference for Predictive Regressions. *Fuzhou University. Time: June 2017.*

Title: Inference for mortality model. *University of Connecticut. Time: April 2017.*

Title: Inference for mortality model and predictive regression. *University of Illinois Urbana-Champaign. Time: January 2017.*

Title: Statistical Inference for Mortality Models. *Boise State University. Time: March 2016.*

Title: Statistical Inference for Mortality Models. *University of Kansas. Time: February 2016.*

Title: Statistical Inference for Mortality Models. *Jiangxi Normal University in NanChang. Time: December 2015.*

Title: Mortality, Longevity Risk and Annuity. *East China Normal University in ShangHai. Time: December 2015.*

Title: Dynamic normal copula and predictive regression. *School of Economics at Xiamen University. Time: July 2015.*

Title: Predictive regression and mortality. *School of Mathematics at Xiamen University. Time: July 2015.*

Title: Tail dependence, extreme quantile and predictive regressions. *University of Kansas. Time: April 2014.*

Title: Tail dependence, extreme quantile and predictive regressions. *Georgia State University. Time: February 2014.*

Title: Interval estimation for random coefficient AR model and predictive regressions. *Purdue University. Time: October 2013.*

Title: Interval estimation for random coefficient AR model and predictive regressions. *Michigan State University. Time: October 2013.*

Title: Interval estimation for random coefficient AR model and predictive regressions. *University of Lausanne. Time: August 2013.*

Title: Interval estimation for endpoint, extreme value copula and tail copula. *South West University, China. Time: June 2013.*

Title: Interval estimation for random coefficient AR model and predictive regressions. *South West University, China. Time: June 2013.*

Title: Interval estimation for risk measures and financial models. *OCC, Department of Treasury. Time: December 2012.*

Title: Interval estimation for random coefficient AR(1) model and predictive regression model. *University of Waterloo. Time: November 2012.*

Title: Empirical likelihood for high dimensional data. *SuZhou University. Time: July 2012.*

Title: Interval estimation for endpoint, extreme value copula and tail copula. *Zhejiang University. Time: July 2012.*

Title: Empirical likelihood for high dimensional data. *Jilin University. Time: July 2012.*

Title: Interval estimation for endpoint, extreme value copula and tail copula. *Nanjing Normal University. Time: June 2012.*

Title: Interval estimation for endpoint, extreme value copula and tail copula. *SAMSI.* *Time: April 2012.*

Title: Empirical likelihood for high dimensional data. *SAMSI. Time: March 2012.*

Title: Interval Estimation for Risk Measures and Copulas. *Place:* University of Lausanne. *Time:* September 2011.

Title: Interval Estimation for GARCH(1,1) models. *Place:* WuXi, China. *Time:* July 2011.

Title: Jackknife empirical likelihood for estimating equations. *Place:* LanZhou University, China. *Time:* July 2011.

Title: Copulas and Risk Management. *Place:* NanChang HangKong University, China. *Time:* June 2011.

Title: Interval estimation for AR(1) and GARCH(1,1) models. *Place:* Xiamen University. *Time:* December 2010.

Title: Interval estimation for AR(1) and GARCH(1,1) models. *Place:* University of California at Davis. *Time:* November 2010.

Title: ELM and JELM. *Place:* University of Wisconsin. *Time:* September 2010.

Title: ELM and JELM. *Place:* University of Lisbon. *Time:* May 12, 2010.

Title: ELM and JELM. *Place:* University of College London. *Time:* May 10, 2010.

Title: ELM and JELM. *Place:* Utah State University. *Time:* April 8, 2010.

Title: ELM and JELM. *Place:* University of Utah. *Time:* April 9, 2010.

Title: Questions on t-statistics and intermediate quantiles. *Place:* FuDan University. *Time:* December 2008.

Title: Goodness-of-fit tests for heavy tailed distributions and for parametric models of bivariate extremes. *Place:* University of Hong Kong. *Time:* October 2007.

Title: Goodness-of-fit tests for heavy tailed distributions and for parametric models of bivariate extremes. *Place:* Chinese University of Hong Kong. *Time:* October 2007.

Title: Multivariate tail copula: modeling and estimation. *Place:* Georgia State University. *Time:* March 2006.

Title: Introduction to extreme value theory. *Place:* Iowa State University. *Time:* March 2006.

Title: Data tilting for high quantiles. *Place:* University of Bern. *Time:* Dec. 2005.

Title: Variance reduction in nonparametric regression models. *Place:* Georgia State University. *Time:* Nov. 2005.

Title: Variance reduction in nonparametric regression models. *Place:* Munich University of Technology. *Time:* Oct. 2005.

Title: Data tilting for high quantiles. *Place:* Center for Mathematical Sciences, Munich University of Technology. *Time:* July 2005.

Title: Data tilting for rare events. *Place:* Department of Statistics, Iowa State University. *Time:* January 21, 2005.

Title: Confidence intervals for high quantiles. *Place:* Department of Mathematics, WUSTL. *Time:* October 1, 2004.

Title: Inference for double AR(l) models and near integrated AR models. *Place:* School of Mathematics, Georgia Tech. *Time:* September 23, 2004.

Title: Empirical likelihood methods for extremes. *Place:* Department of Mathematics, HKUST. *Time:* March 8, 2004.

Title: Empirical likelihood methods for extremes. *Place:* Institute of Statistical Science, Academia Sinica. *Time:* March 1, 2004.

Title: Data tilting for High quantiles. *Place:* Department of Mathematics, TamKang University. *Time:* Feb 24, 2004.

Title: Empirical Likelihood Methods with Heavy Tails. *Place:* Department of Statistics, National Tsing Hua University. *Time:* Feb 20, 2004.

Title: Garch models and nonparametric regression with infinite variance. *Place:* Department of Mathematics, Taiwan National University. *Time:* Feb 16, 2004.

Title: Empirical likelihood methods with heavy tails. *Place:* University of Lisbon, Portugal. *Time:* July 2003.

Title: Inference for Garch models. *Place:* Tilburg University, The Netherlands. *Time:* June 2003.

Title: Empirical likelihood methods with heavy tails. *Place:* Eurandom, The Netherlands. *Time:* June 2003.

Title: Inference for ROC curves. *Place:* IsYE, Georgia Tech. *Time:* April 2003.

Title: GARCH models and least absolute deviations estimator for nonparametric regression models. *Place:* Department of Mathematics and Statistics, Texas Tech University. *Time:* February 2003.

Title: Inference for ROC curves. *Place:* Department of Biostatistics, Emory University. *Time:* February 2003.

Title: Smooth estimation of dependence function. *Place:* Eurandom, The Netherlands. *Time:* January 2003.

Title: Empirical likelihood methods with heavy tails . *Place:* AMS meeting in Orlando, Florida. *Time:* November, 2002. (invited talk)

Title: Parameter estimation and rare event for GARCH models. *Place:* University of Illinois at Chicago. *Time:* October 2002.

Title: Empirical likelihood methods with heavy tails. *Place:* Department of Statistics, University of Georgia, Athens. *Time:* September 26, 2002.

Title: Empirical likelihood methods with heavy tails. *Place:* School of mathematics, Georgia Tech. *Time:* September 5, 2002.

Title: Statistical analyses of extremal events. *Place:* Center for disease control and prevention, Atlanta. *Time:* August 2, 2002.

Title: Local linear estimation and empirical likelihood confidence interval for an ROC curve. *Place:* Texas Tech. *Time:* November, 2001.

Title: Heavy Tailed Time Series. *Place:* IBM Watson Research Center. *Time:* March 2001

Title: Local Linear Estimation for a Distribution, and Nonparametric regression with Infinite-Variance Errors. *Place:* University of Hong Kong. *Time:* September 2000

Title: Tail Index Estimation for ARMA Model, and Nonparametric Regression with Infinite-Variance Errors. *Place:* The Chinese University of Hong Kong *Time:* November 2000

Title: Bias-Corrected Estimators for Monotone and Concave Frontier Functions. *Place:* Erasmus University Rotterdam. *Time:* September 1999

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