CHENG YONG TANG

CONTACT INFORMATION

Department of Statistical Science
Fox School of Business and Management
Temple University
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APPOINTMENTS

- 07/2018– Seymour Wolfbein Senior Research Fellow
  Fox School of Business, Temple University
- 07/2016– 06/2019 Director of the Graduate Programs in Statistics
  Department of Statistical Science
  Fox School of Business, Temple University
- 07/2014– Associate Professor of Statistics
  Department of Statistical Science
  Fox School of Business, Temple University
- 08/2012–08/2014 Assistant Professor of Business Analytics
  Business School, University of Colorado Denver
- 06/2008–08/2013 Assistant and Associate Professor of Statistics
  Department of Statistics and Applied Probability
  National University of Singapore

EDUCATION

05/2008 Ph.D. in Statistics, Iowa State University, GPA: 4.0/4.0.

09/2003 M.Sc. in Statistics, National University of Singapore.

07/2001 B.Sc. in Management Science & B.E. (Dual) in Computer Science, University of Science and Technology of China.

RESEARCH INTERESTS

- Methods, theory, and applications in statistics and data science.
  - Empirical likelihood
  - Longitudinal and dependent data analysis
  - High-dimensional data analysis
  - Financial statistics and Econometrics
  - Sampling statistics and analysis of missing data
  - Nonparametric and semiparametric statistical methods

EDITORIAL BOARD

- Associate Editor for Reproducibility, Journal of the American Statistical Association (*A&CS*), 01/2019 –
- Associate Editor, Journal of Business & Economic Statistics, 08/2019 –

Awards and Honors

Research Awards and Honors

- Seymour Wolfbein Senior Research Fellow, Fox School of Business, Temple University, 2018 –.
- Dean's Research Honor Roll, Fox School of Business, Temple University, 2015, 2018.
- High Achievements in Sponsored Projects, Fox School of Business, Temple University, 2016, 2017, 2018.
- Top 10 Highly Cited Faculty Members, Fox School of Business, Temple University, 2016, 2017.
- Young Scientist Award, Faculty of Science, National Univ. of Singapore, 2012.
- Elected member, International Statistical Institute (ISI), 2012
- IMS Laha Travel Award, 2008.
- Research Excellence Award, Iowa State University, 2008.
- Student Paper Award for JSM 2008 (ASA Sections on Social Statistics, Government Statistics, and Survey Research Methods).
- Student Paper Award for JSM 2005 (ASA Section on Risk Analysis).

Teaching Awards

- Nomination for the University Teaching Excellence Award, National Univ. of Singapore, 2010.
- Teaching Excellence Award, Faculty of Science, National Univ. of Singapore, 2009.
- Teaching Excellence Award, Iowa State University, 2008.

Service Awards

- ICSA 2019 President's Citation Award – *"In recognition and appreciation of his dedicated and outstanding service and leadership as the Chair of the Program Committee for the 2018 ICSA Applied Statistics Symposium."*

Grants/Funded Research

6. NSF IIS-1546087 "BIGDATA: Collaborative Research: F: IA: Statistical Learning for Big Data with Random Projections". National Science Foundation. **PI**. $161,155. 09/2015-09/2019.
5. NSF SES-1533956 "Exploring Joint Modeling Approaches for Longitudinal Data: Parsimonious Correlation Modeling and Discrete Observations". National Science Foundation. **PI**. $38,101. 09/2015-09/2017.
4. A Subaward of NIH R01GM113243-04 (PI: Robert T. Krafty) "A Statistical Framework for Spectral Analysis of Electrophysiology". **Subaward PI**. $96,644. 07/2015-05/2018.
3. "Regularization and variable selection in high dimensional computer intensive statistical methods". Singapore Ministry of Education Academic Research Fund. **PI**. S$50,800. 08/2011-07/2014.
2. "Assessing the uncertainties in predicting default probabilities". National Uni-

VERSITY OF SINGAPORE, RISK MANAGEMENT INSTITUTE RESEARCH GRANT. **PI**. S$60,000. 07/2011-07/2013.

1. "On the asymptotic bias in estimating continuous-time financial econometric models and its application ". SINGAPORE MINISTRY OF EDUCATION ACADEMIC RESEARCH FUND. **PI**. S$120,000. 07/2008-07/2012.

PUBLICATIONS

student (at the time of the work)*; as corresponding author §

28. BRUCE, S. A.*, TANG, C. Y., HALL, M. H., AND KRAFTY, R. T. (2019). Empirical frequency band analysis of nonstationary time series. *Journal of the American Statistical Association, Theory and Methods.* To appear.

27. TANG, C. Y., ZHANG, W., AND LENG, C. (2019). Discrete longitudinal data modeling with a mean-correlation regression approach. *Statistica Sinica*. **29** 853-876.

26. YUAN, M.*, TANG, C. Y.§, HONG, Y. AND YANG, J. (2018). Disentangling and assessing uncertainties in multiperiod corporate default risk predictions. *Annals of Applied Statistics.* **12** 2587-2617.

25. CHANG, J., TANG, C. Y.§, AND WU, T. T. (2018). A new scope of penalized empirical likelihood with high-dimensional estimating equations. *Annals of Statistics*. **46** 3185-3216.

24. DONG, Y., XIA, Q.*, TANG, C.Y., LI, Z.* (2018). On sufficient dimension reduction with missing responses through estimating equations. *Computational Statistics and Data Analysis*. **126** 67-77.

23. CHANG, J., DELAIGLE, A., HALL, P., AND TANG, C. Y. § (2018). A frequency domain analysis of the error distribution from noisy high-frequency data. *Biometrika*. **105** 353-369.

22. CHANG, J., TANG, C. Y. § AND WU, Y. (2016). Local independence feature screening for nonparametric and semiparametric models by marginal empirical likelihood. *Annals of Statistics*. **44** 515-539.

21. WU, T. T. , LI, G., AND TANG, C. Y. (2015). Empirical likelihood and variable selection for censored linear regression. *Scandinavian Journal of Statistics.* **42** 798-812.

20. ZHANG, W., LENG, C. AND TANG, C. Y.§ (2015). A joint modeling approach for longitudinal studies. *Journal of the Royal Statistical Society, Series B.* **77** 219-238.

19. TANG, C. Y. AND WU, T. T. (2014). Nested coordinate descent algorithms for empirical likelihood. *Journal of Statistical Computation and Simulation*.**84** 1917-1930.

18. LIU, C.* AND TANG, C. Y.§ (2014). A quasi-maximum likelihood approach for integrated covariance matrix estimation with high frequency data. *Journal of Econometrics*. **180** 217-232.

17. CHANG, J., TANG, C. Y.§ AND WU, Y. (2013). Marginal empirical likelihood and

sure independence screening. *Annals of Statistics.* **41** 2132-2148.

16. LIU, C. * AND TANG, C. Y.§ (2013). A state space model approach to integrated covariance matrix estimation with high frequency data. *Statistics and Its Interface (Special FERM2012 Issue, invited article).* **6** 463-475

15. FAN, Y. AND TANG, C. Y.§ (2013). Tuning parameter selection for high dimensional penalized likelihood. *Journal of the Royal Statistical Society, Series B.* **75** 531-552.

14. CHEN, S. X., QIN, J. AND TANG, C. Y. (2013). Mann-Whitney test with adjustments to pre-treatment variables for missing values and observational study. *Journal of the Royal Statistical Society, Series B.* **75** 81-102.

13. TANG, C. Y.§ AND QIN, Y. (2012). An efficient empirical likelihood approach for estimating equations with missing data. *Biometrika.* **99** 1001-1007

12. LENG, C. AND TANG, C. Y. (2012). Sparse matrix graphical models. *Journal of the American Statistical Association, Theory and Methods* **107** 1187-1200.

11. LENG, C. AND TANG, C.Y. (2012). Penalized empirical likelihood and growing dimensional general estimating equations. *Biometrika.* **99** 703-716.

10. TANG, C. Y.§ AND LENG, C. (2012). An empirical likelihood approach to quantile regression with auxiliary information. *Statistics and Probability Letters.* **82** 29-36.

9. TANG, C. Y.§ AND LENG, C. (2011). Empirical likelihood and quantile regression in longitudinal data analysis. *Biometrika.* **98** 1001-1006.

8. CHEN, S. X. AND TANG, C. Y. (2011). Nonparametric regression with discrete covariates and missing values. *Statistics and Its Interface.* **4** 463-474.

7. CHEN, S. X. AND TANG, C. Y. (2011). Properties of census dual system population size estimators. *International Statistical Review.* **79** 336-361.

6. LENG, C. AND TANG, C. Y.§ (2011). Improving variance function estimation in longitudinal data analysis. *Canadian Journal of Statistics.* **39** 656-670.

5. TANG, C. Y.§ AND LENG, C. (2010). Penalized high dimensional empirical likelihood. *Biometrika.* **97** 905-920.

4. CHEN, S. X., TANG, C. Y. AND MULE, V. T. (2010). Local post-stratification in dual system accuracy and coverage evaluation for the U.S. Census. *Journal of the American Statistical Association, Applications & Case Studies.* **105** 105-119.

3. TANG, C. Y. AND CHEN, S. X. (2009). Parameters estimation and bias correction for diffusion processes. *Journal of Econometrics.* **149** 65-81.

2. CHEN, S. X., GAO, J. AND TANG, C. Y. (2008). A test for model specification of diffusion processes. *Annals of Statistics.* **36** 167-198.

1. CHEN, S. X. AND TANG, C. Y. (2005). Nonparametric inference of value at risk for dependent financial returns. *Journal of Financial Econometrics.* **3** 227-255.

REVIEWS AND DISCUSSIONS

2. CHANG, J., GUO, J., AND TANG, C.Y. (2018). Peter Hall's contribution to empirical likelihood. *Statistica Sinica*. **28** 2375-2387.

1. TANG, C.Y. AND FAN,Y. (2013). Discussion of "Large covariance estimation by thresholding principal orthogonal complements". *Journal of the Royal Statistical Society, Series B.* **75** 671.

MANUSCRIPTS

student (at the time of the work)*; as corresponding author §

16. ZHANG, W., LI, Y.*, AND TANG, C.Y.§ (2019). A study on temporal dependence modeling with latent Gaussian variables.

15. YE, Z. LI, X.*, AND TANG, C.Y. (2019). Nonparametric inference for superposed renewal processes with applications in parametric inferences.

14. ZHU, L.* AND TANG, C. Y.§ (2019). A predictive time-to-event modeling approach with longitudinal measurements and missing data.

13. ZHANG, W., LIN, X*., CHEN, Y., AND TANG, C.Y. (2019). A jump information criterion with wavelet approaches for high-frequency data.

12. GUO, X. AND TANG, C. Y.§ (2019). Information criteria for latent factor models: a study with general factor pervasiveness and adaptivity.

11. CHANG, J., LIU, C., AND TANG, C.Y. (2019). Optimal covariance matrix estimation for high-dimensional noise in high-frequency data.

10. GUO, X. AND TANG, C. Y.§ (2018). On the factor pervasiveness and the estimation of the numbers of latent factors.

9. ZHANG, W., LI, Y.*, AND TANG, C.Y.§ (2018). jmdl: An R package for analyzing discrete longitudinal data with the mean-correlation regression approaches.

8. GUO, X. AND TANG, C. Y.§ (2018). Specification tests for covariance structures in high-dimensional statistical models.

7. TANG, C. Y.§, FANG, E. X., AND DONG, Y. (2018). High-dimensional interactions detections with sparse principal Hessian matrix.

6. DUAN, R.*, LIANG, C. J., SHAW, P., TANG, C. Y., AND CHEN, Y. (2018). Missing at random or not: a semiparametric testing approach.

5. TANG, C. Y. (2018). On the identification and model specification for nonignorable missing data modeling.

4. HAN, X., FANG, E. X., AND TANG, C. Y.§ (2017). Pre-processing with orthogonal decompositions for high-dimensional explanatory variables.

3. CHANG, J., TANG, C. Y.§, AND WU, T. T. (2016). High-dimensional statistical inferences with over-identification: confidence set estimation and specification test.

2. LI, C., TANG, C. Y.§, AND YAN, J.* (2015). Prevalent estimation bias and leverage effect puzzle: evidence from multifactor stochastic volatility models.

1. TANG, C. Y. AND FAN, Y. (2013). Precision matrix estimation by inverse principal orthogonal decomposition.

TEACHING

Temple University

- Fall, 2019 STAT 8001 Probability and Statistics Theory I (15 Students).
- Spring, 2019 STAT 8114 Survival Analysis I (14 Students).
- Spring, 2019 STAT 8004 Statistical Methods II (11 Students).
- Fall, 2018 STAT 8003 Statistical Methods I (14 Students).
- Spring, 2018 STAT 9190 Topics on Longitudinal Data Analysis and Covariance Estimations. (12 Students).
- Spring, 2018 STAT 8004 Statistical Methods II (16 Students).
- Fall, 2017 STAT 8003 Statistical Methods I (24 Students)
- Spring, 2017 STAT 8004 Statistical Methods II (21 Students).
- Spring, 2017 STAT 8114 Survival Analysis I (10 Students).
- Fall, 2016 STAT 8003 Statistical Methods I (24 Students).
- Spring, 2016 STAT 8004 Statistical Methods II (22 Students).
- Spring, 2016 STAT 8102 Statistical Methods III (8 Students).
- Spring, 2015 STAT 8004 Statistical Methods II (16 Students).
- Spring, 2015 STAT 8114 Survival Analysis I (11 Students).
- Fall, 2014 STAT 8102 Statistical Methods III (7 Students).

University of Colorado Denver

- Spring, 2014 DSCI 6828 Data Mining:Predictive Modeling(12 Students).
- Spring, 2014 BUSN 6530 Data Analysis for Managers (38 Students).
- Fall, 2013 BUSN 6530 Data Analysis for Managers (2 sessions, 80 Students).
- Spring, 2013 BUSN 6530 Data Analysis for Managers (2 sessions, 45 Students).
- Fall, 2012 BUSN 6530 Data Analysis for Managers (33 Students).

National University of Singapore

- Semester 2, 2011-2012 ST4245 Statistical Methods for Finance (74 Students).
- Semester 2, 2010-2011 ST4245 Statistical Methods for Finance (62 Students).
- Semester 1, 2010-2011 ST5210 Multivariate Data Analysis (89 Students).
- Semester 2, 2009-2010 ST4245 Statistical Methods for Finance (43 students).
- Semester 1, 2009-2010 ST5201 Basic Statistical Theory (72 students).
- Semester 2, 2008-2009 ST4245 Statistical Methods for Finance (30 students).
- Semester 1, 2008-2009 ST5201 Basic Statistical Theory (59 students).

Iowa State University

- Fall, 2007 Stat 305 Engineering Statistics
- Spring, 2007 Stat 305 Engineering Statistics

PHD STUDENTS AND DISSERTATIONS SUPERVISED

7. Nan Sun, in progress. PhD candidate at Temple University.
6. Naimin Jing, in progress. PhD candidate at Temple University.
5. Lili Zhu, 2019. PhD, Temple University. Now Principal Research Biostatistician at Bristol-Myers Squibb. **Role: Disseration Advisor and Dissertation Advisory Committee Chair.** Dissertation:*"A predictive time-to-event modeling approach with longitudinal measurements and missing data"*.
4. Scott A. Bruce, 2018. PhD, Temple University. Now Assistant Professor of Statistics at George Mason University. **Role: Dissertation Advisory Committee Chair; co-advised with Dr Robert T. Krafty.** Dissertation:*"Statistical methods for spectral analysis of nonstationary time series"*.
3. Qi Xia, 2017. PhD, Temple University. Now Senior Statistician at Johnson & Johnson. **Role: Dissertation Advisory Committee Chair; co-advised with Dr Yuexiao Dong.** Dissertation:*"Sufficient dimension reduction with missing data"*.
2. Lauren Spirko, 2017. PhD, Temple University. Now Assistant Professor at Temple University. **Role: Dissertation Advisory Committee Chair; co-advised with Dr Karthik Devarajan.** Dissertation:*"Variable selection and supervised dimension reduction for large-scale genomic data with censored survival outcomes"*.
1. Cheng Liu, 2013. PhD, National University of Singapore. Now Associate Professor in Economics and Management School of Wuhan University, Hubei, China. **Role: Dissertation Advisor.** Dissertation:*"Covariance matrix estimation with high frequency financial data"*.

PhD Dissertation Advisory Committee Served

- 2019 Chen Chen.
- 2018 Ahmad Alothman, Yeil Kwon.
- 2016 Chaozeng Yang, Yanping Liu.
- 2015 Yiyong Fu.

Faculty Services

Department level

- Director of the Graduate Programs in Statistics, 2016-2019, Department of Statistical Science, Fox School of Business, Temple University.
  - *Role: Leading and administrating the Master and PhD programs in Statistics – students recruiting, curriculum development, and placements; collaboratively working with developing the Master Program in Business Analytics and Master Program in Statistics and Data Science, and building connections between the graduate programs.*
- Chair, Graduate Affairs Committee, 2016-2019, Department of Statistics, Fox School of Business, Temple University.
  - *Role: This committee oversees recruiting and evaluating graduate students of the Department. Recruiting includes conducting phone/webex/skype interviews, planing and meeting with prospective PhD candidates on campus visits, and providing evaluations*

and recommendations for applicants. The committee also administrates the screening exam for PhD students.

- Faculty Promotion and Tenure Committee, 2019 – 2020, Department of Statistics, Fox School of Business, Temple University.
- Steering Committee of the Department of Statistical Science, 2016-2019, Fox School of Business, Temple University.
- Department Merit Committee, 2015-2016, 2016-2017, 2019-2020, Department of Statistical Science, Fox School of Business, Temple University.
- Faculty Contract Renewal Committee, 2016-2017, 2019-2020, Department of Statistics, Fox School of Business, Temple University.
- Faculty Search Committee, 2016-2017, 2018-2020, Department of Statistics, Fox School of Business, Temple University.
- Chair of the Faculty Search Committee, 2015-2016, Department of Statistics, Fox School of Business, Temple University.
- Seminar Coordinator, 2015-2016, Department of Statistics, Fox School of Business, Temple University.
- Internal Advisory Committee, 2014-2016, Master of Business Analytic Program, Fox School of Business, Temple University.
- Graduate Affairs Committee, 2014-, Department of Statistics, Fox School of Business, Temple University.

COLLEGE LEVEL

- Serving as the Chair of the mentoring group for Dr Vishesh Karwa, 2018-now, Department of Statistical Science, Fox School of Business, Temple University.
- Serving in the mentoring group for Dr Cameron Ellis, 2019-now, Fox School of Business, Temple University.
- Doctor Programs Committee, 2016-2019, Fox School of Business, Temple University.
- Master Programs Committee, 2014-2015, 2016-2019, Fox School of Business, Temple University.
- School Merit Committee, 2016-2017, Fox School of Business, Temple University.
- Associate Dean in Research Search Committee, 2019, Fox School of Business, Temple University.
- Data Science Faculty Search Committee, 2016-2017, Fox School of Business, Temple University.

EARLIER SERVICES

- Course outcome assessment coordinator of BUSN 6530, University of Colorado Denver.
- Graduate curriculum committee, Master of Business Analytics Program, Business School, University of Colorado Denver.
- Graduate scholarship committee, Business School, University of Colorado Denver.
- Consulting center committee, Department of Statistics and Applied Probability, National University of Singapore.

- Teaching excellence committee, Department of Statistics and Applied Probability, National University of Singapore.

PROFESSIONAL SERVICES

- Serving as an Associate Editor of Journal of Business and Economic Statistics, 08/2019 – present.
- Serving as an Associate Editor for Reproducibility of Journal of the American Statistical Association, 01/2019 – present.
- Serving in the Scientific Program Committee of the 12th International Conference of the ERCIM WG on Computational and Methodological Statistics (CMstatistics 2019) Conference.
- Serving as the Chair of the Program Committee of the 2018 ICSA Applied Statistics Symposium. **(recognized by the "ICSA 2019 President's Citation Award").**
- Serving in the Program Committee and the Junior Researcher Award Committee of the 2018 ICSA China Conference.
- Serving in the Student Paper Award Committee for the 2017 ICSA Applied Statistics Symposium.
- Serving in the Organizing Committee of an IMS Singapore program on "Empirical Likelihood Based Methods in Statistics" in 2016.
- Serving in the International Chinese Statistical Association (ICSA) 2016 International Conference Program Committee.
- Organizer of an Invited Session on Joint Modeling for Longitudinal Data Analysis for ENAR 2016 Conference.
- Serving as a panelist for the NSF DMS Statistics program.
- Organizer of an Invited Session on Financial Statistics with Big Data for Institute of Mathematical Statistics (IMS)-China 2015 International Conference.
- Organizer of an Invited Session on Missing Data Analysis for ICSA 2012 Applied Statistics Symposium.
- Organizer of a Topic Contributed Session on Financial Statistics for Joint Statistical Meetings (JSM) 2010.
- Regularly serving as a referee/reviewer for journals including *Annals of Statistics, Annals of Applied Statistics, Bernoulli, Biometrika, Biometrics, Canadian Journal of Statistics, Statistical Science, Econometrica, Test, Econometric Journal, Journal of the American Statistical Association, Journal of Business and Economic Statistics, Journal of Econometrics, Journal of Economic Inequality, Journal of Multivariate Analysis, Journal of Machine Learning Research, Journal of Nonparametric Statistics, Journal of Official Statistics, Journal of Causal Inference, Journal of the Royal Statistical Society, Series B, Journal of Statistical Planning and Inference, Journal of Statistical Computation and Simulation, Mathematical Reviews, Science China, Scandinavian Journal of Statistics, Statistica Sinica, Statistical Modeling, Statistics and Its Interface, Technometrics, Applied Stochastic Models in Business and Industry, Computational Statistics and Data Analysis and, Statistics and Probability Letters.*
- External assessor for Research Grants Council (RGC) of Hong Kong.

- PhD theses examiner, National University of Singapore.
- PhD thesis external examiner for Nanyang Technology University, Singapore.

INVITED TALKS

61. "A predictive time-to-event modeling approach with longitudinal measurements and missing data." *Department of Biostatistics, Epidemiology and Informatics, University of Pennsylvania*. Philadelphia, PA. October, 2019.
60. "A predictive time-to-event modeling approach with longitudinal measurements and missing data." *2019 Forum on the Frontier of Data Science, SWFEU*. Chengdu, China. July, 2019.
59. "High-dimensional statistical inferences with over-identification." *The 2019 ICSA China Conference*. Tianjin, China. July, 2019.
58. "Pre-processing with orthogonal decompositions for high-dimensional explanatory variables." *Seminar at School of Mathematics and Statistics, Northeastern Normal University*. Changchun, China. July, 2019.
57. "A predictive time-to-event modeling approach with longitudinal measurements and missing data." *2019 Summer Workshop on Applied Statistics*. Changchun, China. July, 2019.
56. "High-dimensional statistical inferences with over-identification." *Department of Statistics and Actuarial Science, Hong Kong University*. Hong Kong, China. May, 2019.
55. "A predictive time-to-event modeling approach with longitudinal measurements and missing data. " *Department of Statistics, George Mason University*. Fairfax, VA. March, 2019.
54. "Pre-processing with orthogonal decompositions for high-dimensional explanatory variables." *The 2019 ICSA Conference on Data Science*. Xishuangbanna, China. January, 2019.
53. "Pre-processing with orthogonal decompositions for high-dimensional explanatory variables." *The 11th International Conference of the ERCIM WG on Computational and Methodological Statistics* . Pisa, Italy. December, 2018.
52. "Pre-processing with orthogonal decompositions for high-dimensional explanatory variables." *Department of Statistics, Columbia University*. New York. October, 2018.
51. "High-dimensional statistical inferences with over-identification." *Department of Statistics, University of Kentucky*. Lexington, KY. September, 2018.
50. "Pre-processing with orthogonal decompositions for high-dimensional explanatory variables." *The 2018 ICSA China Conference*. Qingdao, China. July, 2018.
49. "High-dimensional statistical inferences with over-identification: confidence set estimation and specification test." *The ICSA 2018 Applied Statistics Symposium*. New Brunswick, NJ. June, 2018.

48. "Joint modeling approaches for longitudinal studies". *Department of Pharmacology and Experimental Therapeutics, Biostatistics Division, Thomas Jefferson University*. Philadelphia, PA. April, 2018.

47. "Mean-variance-correlation modeling approaches for longitudinal studies". *Department of Applied Economics and Statistics, University of Delaware.* Newark, DE. October, 2017.

46. "A new scope of penalized empirical likelihood with high-dimensional estimating equations". *Joint Statistical Meetings 2017.* TOPIC CONTRIBUTED. Baltimore, MD. July, 2017.

45. " High-dimensional empirical likelihood and statistical inferences". *The 2017 IMS-China International Conference.* Nanning, China. July, 2017.

44. "Sufficient dimension reduction with missing responses". *The 1st International Conference on Econometrics and Statistics* . Hong Kong, China. June, 2017.

43. "Pre-processing with orthogonal decompositions for high-dimensional explanatory variables." *Conference on High-dimensional Statistical Inference in the Era of Big Data*. Beijing, China. May, 2017.

42. "Sufficient dimension reduction with missing responses". *31st New England Statistics Symposium*. Storrs, CT. April, 2017.

41. " A new scope of penalized empirical likelihood with high-dimensional estimating equations". *The 10th ICSA international conference.* Shanghai, China. December, 2016.

40. "Joint modeling approaches for longitudinal studies". *2016 OUC Winter Workshop on Complex Data.* Qingdao, China. December, 2016.

39. "Mean-correlation regression for discrete longitudinal responses". *2016 International Royal Society of Statistics Conference.* Manchester, United Kingdom. September, 2016.

38. "Precision matrix estimation by inverse principal orthogonal decomposition". *CRiSM Workshop on Recent Developments in Large-scale Inference.* Coventry, United Kingdom. August, 2016.

37. "Precision matrix estimation by inverse principal orthogonal decomposition". *Conference on Statistical Learning and Data Science.* Chapel Hill, NC. June, 2016.

36. "Precision matrix estimation by inverse principal orthogonal decomposition". *The 25th ICSA Applied Statistics Symposium.* Atlanta, GA. June, 2016.

35. "Mean-correlation regression for discrete longitudinal responses". *ENAR 2016 Spring Meeting.* Austin, TX. March, 2016.

34. "Mean-correlation regression for discrete longitudinal responses". *Department of Statistics, University of California Riverside.* Riverside, CA. March, 2016.

33. "Mean-correlation regression for discrete longitudinal responses". *Department of Statistics, Texas A&M University.* College Station, TX. November, 2015.

32. "Local independence feature Screening for nonparametric and semiparametric models". *Joint Statistical Meetings 2015*. Seattle, WA. TOPIC CONTRIBUTED. August, 2015.

31. "Local independence feature Screening for nonparametric and semiparametric models". *2014 Department of Mathematics and Statistics, University of Maryland, Baltimore County*. Baltimore, MD. May, 2015.

30. "Joint modeling approaches for longitudinal studies". *Department of Biostatistics and Computational Biology, University of Rochester Medical Center*. Rochester, NY. April, 2015.

29. " On a quasi-maximum likelihood approach for integrated covariance matrix estimation with high frequency data." *The 2015 American Mathematical Society Spring Sectional Meeting*. East Lansing, MI. March, 2015.

28. "Joint modeling approaches for longitudinal studies". *Wilks Statistics Seminar, Princeton University*. Princeton, NJ. March, 2015.

27. "Precision matrix estimation by inverse principal orthogonal decomposition". *The third IMS Asia Pacific Rim Meeting*. Taipei. July, 2014.

26. "Precision matrix estimation by inverse principal orthogonal decomposition". *Guanghua School of Management, Peking University*. Beijing, China. June, 2014.

25. "Local independence feature screening for nonparametric and semiparametric models". *2014 Joint Applied Statistics Symposium of International Chinese Statistical Association & Korean International Statistical Society*. Portland, OR. June, 2014.

24. "A joint modeling approach for longitudinal studies". *The Ninth ICSA International Conference: Challenges of Statistical Methods for Interdisciplinary Research and Big Data*. Hong Kong, China. December, 2013.

23. "A joint modeling approach for longitudinal studies". *Departmental Seminar, Penn State University*. State College, PA. December, 2013.

22. "Local post-stratification in dual system surveys for censuses". *59th ISI world Statistics Congress*. Hong Kong, China. August, 2013.

21. "Marginal empirical likelihood and sure independence screening". *IMS-China International Conference on Statistics and Probability 2013*. Chengdu, China. July, 2013.

20. "A quasi-maximum likelihood approach for covariance matrix with high frequency data". *Workshops on Financial Time Series Analysis: High-dimensionality, Non-stationarity and the Financial Crisis*. Singapore. June, 2012.

19. "Empirical likelihood and quantile regression in longitudinal data analysis". *International Conference on Advances in Probability and Statistics–Theory and Applications: A Celebration of N. Balakrishnan's 30 years of Contributions to Statistics*. Hong Kong SAR, China. December, 2011.

18. "Mann-Whitney test with adjustments to pre-treatment variables and observational studies". *IMS-China International Conference on Statistics and Probability*

2011. XiAn, China. July, 2011.

17. "Tuning parameter selection in high dimensional penalized likelihood". *International Conference on High Dimensional Statistics: Advances and Challenges*. Singapore. May, 2011.

16. "Penalized empirical likelihood and growing dimensional general estimating equations". *2011 International Conference on Probability, Statistics and Data Analysis*. Raleigh, NC. April, 2011.

15. "Mann-Whitney test with adjustments to pre-treatment variables and observational studies". Department of Statistics, North Carolina State University, Raleigh, NC. April, 2011.

14. "Penalized empirical likelihood and growing dimensional general estimating equations". *The Eighth ICSA International Conference: Frontiers of Interdisciplinary and Methodological Statistical Research*. Guangzhou, China. December, 2010.

13. "Two sample Mann-Whitney test with adjustments to pre-treatment variables". *Joint Statistical Meetings 2010*. Vancouver, Canada. TOPIC CONTRIBUTED. August, 2010.

12. Invited discussant of "Bias in estimating linear multivariate diffusions". *Fourth Annual Risk Management Conference*. Singapore. July 2010.

11. "Penalized empirical likelihood and growing dimensional general estimating equations". *International Conference on Statistical Analysis of Complex Data*. Kunming, China. July, 2010.

10. "Two sample Mann-Whitney test with adjustments to pre-treatment variables". *2010 International Conference on Quantitative Methods in Business Applications.* Beijing, China. June, 2010.

9. "A Test for Model Specification of Diffusion Processes". *Second Singapore Conference on Quantitative Finance*. Singapore. March, 2010.

8. "Parameter estimation for diffusion processes". *First Singapore Conference on Statistical Finance*. Singapore. October, 2009.

7. "Parameter estimation for diffusion processes". *2009 International Conference on Financial Statistics and Financial Econometrics (ICFSFE)*. Chengdu, China. July, 2009.

6. "Local post-stratification in dual system accuracy and coverage evaluation for US Census". *Department of Statistics, Singapore*. November, 2008.

5. "Parameters estimation and bias correction for diffusion processes". *School of Economics, Singapore Management University*. September, 2008.

4. "A nonparametric approach to US Census population size estimation". *Joint Statistical Meetings 2008*. Denver, Co. TOPIC CONTRIBUTED. August 2008. (*This paper received the Student Paper Award for JSM 2008*.)

3. "Parameters estimation and bias correction for diffusion processes". *Conference*

on Likelihood Methods in Finance. Princeton University. October, 2007.

2. "A nonparametric approach to US Census population size estimation". *US Census Bureau Seminar*. December, 2007.

1. "Nonparametric estimation of Value-at-Risk and its standard error for dependent financial returns". *Quantitative Methods in Finance 2002*. Cairns, Australia. December 2002.

Consulting Works

3. Survey design, statistical analysis and missing data treatment. Department of Social Work, National University of Singapore. 07/2011.

2. Survey design, statistical analysis and missing data treatment for the Singapore national elder gambling research. Department of Social Work, National University of Singapore. Funded by Singapore Ministry Of Community Development, Youth And Sports. 07/2010-06/2011.

1. Lecturer for FE5210 Research Methods in Finance. Master of Financial Engineering program, Risk Management Institute of National University of Singapore. Semester 2, 2009-2010 and Semester 2, 2010-2011.

Contributed Talks and Presentations

10. "A joint modeling approach for longitudinal studies". *ENAR 2013 Spring Meeting*. Orlando, Florida. March, 2013.

9. "Penalized high dimensional empirical likelihood". *13th Meeting of New Researchers in Statistics and Probability*. Vancouver, Canada. July 2010.

8. "Local post-stratification in dual system accuracy and coverage evaluation for the U.S. Census". *12th Meeting of New Researchers in Statistics and Probability*. Baltimore MD. July 2009.

7. "Parameters estimation and bias correction for diffusion processes". *2008 World Congress in Probability and Statistics*. Singapore. June 2008.

6. "Local post-stratification and diagnostics in dual system estimation for US Census". *2008 ENAR Meeting*. Washington DC. March 2008.

5. "Local post-stratification and diagnostics in dual system estimation for US Census". *Joint Statistical Meetings 2007*. Salt Lake City, Utah. August 2007.

4. "Local post-stratification and diagnostics in dual system estimation for US Census". *2007 WNAR/IMS Meeting*. Irvine, CA. June 2007.

3. "Nonparametric regression with missing responses and its applications in US Census". *Statistics Spring Research Conference 2007*. Ames, IA. May 2007.

2. "Parameters estimation and bias correction for diffusion processes". *Joint Statistical Meetings 2006*. Seattle, WA. August 2006.

1. "Nonparametric inference of Value-at-Risk for dependent financial returns". *Joint Statistical Meetings 2005*. Minneapolis, MN. August 2005. (*This paper received the Student Paper Award for JSM 2005 in ASA Section on Risk Analysis*)

Travel Grants and Other Awards

- YUMPS travel grant, University of Colorado Denver (2012-2013, 2013-2014)
- Student Scholarship for Statistics Spring Research Conference 2007 (SRC 2007)
- Student Travel Award of JSM 2006 (ASA Section on Survey Research Methods)
- Student Paper Award of JSM 2005 (ASA Section on Risk Analysis)
- Professional Advancement Grants (Travel Support), Iowa State University, (2005, 2006, 2007, 2008)
- Graduate Students Tuition Awards (2004-2008), Iowa State University
- Research Scholarship, National University of Singapore, 2001-2003
- Outstanding Undergraduate Student Scholarships, University of Science and Technology of China (1996, 1997)
- First Class Award, National High School Mathematics Contest, China (1995)

Elected Membership

- Elected member, International Statistical Institute (ISI), 2012

Professional Affiliation

- Elected Member, International Statistical Institute (ISI)
- Fellow, The Royal Statistical Society
- Member, American Statistical Association (ASA)
- Member, Institute of Mathematical Statistics (IMS)
- Member, International Chinese Statistical Association (ICSA)

CY Tang's PhD Thesis Committee at Iowa State University

- **Major Professor:**
  - Dr. Song Xi Chen
- **Thesis committee Members:**
  - Dr. K.B. Athreya
  - Dr. W.A. Fuller
  - Dr. Cindy L. Yu
  - Dr. Tobias Justin

Reference

- Available upon request.