Publication List

Chen Zehua

Department of Statistics & Applied Probability

National University of Singapore

Publications

Journal Papers

1. Chen, Z. and Y. Jiang (2016). An iterated alternate sequential procedure for simultaneous feature selection and precision matrix estimation in sparse high-dimensional multivariate regression models. Submitted.

2. Jiang, Y. and Z. Chen (2016). A Sequential Scaled Pairwise Selection Approach to Edge Detection in Nonparanormal Graphical Models. *Canadian Journal of Statistics* **44(1)**, 25-43.

3. Y. He and Z. Chen (2016). A sequential procedure for feature selection with linear interactive models in ultra-high dimensional feature space. *Annals of the Institute of Statistical Mathematics*, **68(1)**, 155-180.

4. S. Luo, J. Xu and Z. Chen (2015). Extended Bayesian Information Criterion in the Cox Model with a High–dimensional Feature Space. *Annals of the Institute of Statistical Mathematics*, **67** (2), 287-311.

5. S. Luo and Z. Chen (2014). Edge Detection in Sparse Gaussian Graphical Models. *Computational Statistics and Data Analysis* **70** 138-152.

6. S. Luo and Z. Chen (2014). Sequential Lasso cum EBIC for feature selection with ultra-high dimensional feature space. *Journal of the American Statistical Association*, **109**(507), 1229-1240.

7. S. Luo and Z. Chen (2013). Extended BIC for linear regression models with diverging number of parameters and high or ultra-high feature spaces. *Journal of Statistical Planning and Inference*, **143** 494-504.

8. S. Luo and Z. Chen (2013). Selection consistency of EBIC for GLIM with non-canonical links and diverging number of parameters. *Statistics and Its Interface.* **6**, 275-284.

9. J. Chen and Z. Chen (2012). Extended BIC for small-n-large-P sparse GLM. *Statistica Sinica* **22** 555-574.

10. J. Zhao and Z. Chen (2012). A Two-stage penalized logistic regression approach to case-control genome-wide association studies *Journal of Probability and Statistics*, vol. 2012, Article ID 642403, 15 pages, 2012. doi:10.1155/2012/642403.

11. J. Joo, M. Kwak, Z. Chen and G. Zheng (2010). Tutorial in biostatistics: Efficiency robust statistics for genetic linkage and association studies under genetic model uncertainty. *Statistics in Medicine* **29**(1):158-80.

12. Z. Chen and W. Cui (2010). A two-phase procedure for QTL mapping with regression models. *Theoretical and Applied Genetics.* **121**:363-372.

13. Z. Chen, J. Chen. (2009). Tournament Screening cum EBIC for Feature Selection with High Dimensional Feature Spaces. *Scince in China, Series A*, **52**(6): 1327-1341.

14. W. Li and Z. Chen (2009). Multiple interval QTL mapping for trait distribution with a spike. *Genetics*, **182**:337-342.

15. W. Li and Z. Chen (2009). A New Approach to Interval Mapping of Quantitative Trait Loci Using Sib-Pairs. *Statistical Methodology.* **5**, 251-261.

16. Z. Chen and J. Liu. (2009) Mixture Generalized Linear Models for Multiple Interval Mapping of Quantitative Trait Loci in Experimental Crosses. *Biometrics*, **65**: 470-477.

17. J. Chen and Z. Chen. (2008). Extended Bayesian Information Criteria for Model Selection with Large Model Space. *Biometrika*, **95**: 759-771.

18. Z. Chen, J. Liu, L. Shen and Y. G. Wang.(2008). General ranked set sampling for efficient treatment comparisons. *Statistica Sinica*, **18**,91-104.

19. Z. Chen. (2007). Ranked Set Sampling: Its Essence and New Applications. *Environmental and Ecological Statistics*. **14**, 355-363.

20. G. Zheng, K. Ghosh, Z. Chen and Z. Li. (2006). Extreme rank selections for linkage analysis of quantitative trait loci using selected sib-pairs. *Annals of Human Genetics*, **70**, 857-866.

21. H. Chen and Z. Chen (2005). Asymptotic properties of the remedian. *Journal of Nonparametric Statistics*. **17**, 155-165.

22. Z. Chen and S. Zheng (2005). Lifetime distribution based degradation analysis. *IEEE: Transactions on Reliability*. **54** 3-10.

23. G. Zheng and Z. Chen. (2005). Comparison of maximum statistics for hypothesis testing when a nuisance parameter presents only under the alternative. *Biometrics*, **61**, 254-258.

24. Z. Chen and G. Zheng. (2005) Exact robust tests for detecting candidate-gene association in case-parents trio design. *Journal of Data Science*, **3** 19-33.

25. Z. Chen (2005). The full EM algorithm for the MLEs of QTL effects and positions and their estimated variances in multiple interval mapping. *Biometrics*, **61**, 474-480.

26. Z. Chen and H. Chen. (2005). On some statistical aspects of the interval mapping for QTL detection. *Statistica Sinica* **15**, 909-925.

27. Z. Chen, G. Zheng, K. Ghosh and Z. Li. (2005) Linkage disequilibrium mapping of quantitative-trait loci by selective genotyping. *American Journal of Human Genetics* **77**,661-669.

28. Z. Chen and Y. Wang.(2004) Efficient regression analysis with ranked set sampling. *Biometrics*, **60**, 997-1004.

29. G. Zheng and Z. Chen. (2004) Robust tests for candidate-gene association using case-parents trios with a multi-allelic marker. *Biometrical Journal*, **46**, 606-611.

30. Y. G. Wang, Z. Chen and J. Liu (2004). General ranked set sampling with cost considerations. *Biometrics* **60**, 556-561.

31. R. Mukerjee and Z. Chen (2003). On expected lengths of predictive intervals. *Scandinavian Journal of Statistics*, **30** 757-766.

32. G. Zheng, Z. Chen and Z. Li (2003). Test for candidate-gene association using case-parents design when the genetic model is unknown. *Annals of Human Genetics* **67**, 589-597.

33. Z. Chen and L. Shen (2003). Two-layer ranked set sampling with concomitant variables. *Journal of Statistical Planning and Inference* **115** 45-57.

34. Z. Chen (2003). Analysis of component reliability of k-out-of-n systems with censoring, *Journal of Statistical Planning and Inference* **116** 305-315.

35. Z. D. Bai and Z. Chen (2003). On the theory of ranked set sampling and its ramifications, *Journal of Statistical Planning and Inference*, **109**, 81-99.

36. Z. Chen (2003). Ranked set sampling: a methodology for observational economy. in *Development of Modern Statistics and Related Topics*, World Scientific. 189-204.

37. Z. D. Bai, Z. Chen and Y. Wu (2003). Convergence rate of the best-r-point-average estimator for the maximizer of a nonparametric regression function. *Journal of Multivariate Analysis*, **84**, 319-334.

38. Z. Chen (2002). Adaptive ranked set sampling with multiple concomitant variables: an effective way to observational economy., *Bernoulli* **8(3)**, 313-322.

39. X. Zhao and Z. Chen (2002). On the Ranked-Set Sampling M-Estimates for Symmetric Location Families. *Annals of the Institute of Statistical Mathematics*. **54**, 626-640.

40. Z. Chen (2001). The optimal ranked-set sampling scheme for inference on population quantiles, *Statistica Sinica.* **11**, 23-37.

41. Z. Chen (2001). Nonparametric inferences based on general unbalanced ranked-set samples, *Journal of nonparametric statistics*, **13**, 291-310.

42. Z. Chen (2001). Ranked-set sampling with regression type estimators, *Journal of Statistical Planning and Inference*, **92**, 181-192.

43. Z. Chen and Z. D. Bai (2000). The Optimal Ranked-set Sampling Scheme for Parametric Families, *Sankaya*, Series A, **62**, 178-192.

44. Z. Chen (2000). On ranked-set sample quantiles and their applications, *Journal of Statistical Planning and Inference*, **83**, 125-135.

45. Z. Chen (2000). The efficiency of ranked-set sampling relative to simple random sampling under Multi-parameter Families . *Statistica Sinica.* **10**, 247-263.

46. Z. Chen (2000). New developments and directions in ranked set sampling, *Journal of the Chinese Statistical Association*, **38**, 141-166.

47. Z. Chen (1999). Density estimation using ranked-set sampling data, *Environmental and Ecological Statistics*,**6**, 135-146.

48. Z. Chen (1996). Conditional L_p-quantiles and their application to the testing of symmetry in non-parametric regression. *Statistics & Probability Letters*, **29**, 107-115.

49. Z. Chen and K. A. Do (1994). Bootstrap method with saddlepoint approximations and importance resampling. *Statistica Sinica*, Vol. 4, No. 2, 407-421.

50. Z. Chen (1993). Fitting Multivariate Regression Functions by Interaction Spline Models . *J. of Roy. Statist. Soec. series B*, Vol. 55, No. 2, 473-491.

51. Z. Chen and K. A. Do (1992). Importance resampling for the smoothed bootstrap, *J. Statistical Comp. Simu.*, Vol. 42, 107-124.

52. Z. Chen (1991). Interaction Spline Models and their Convergence Rate, *Annals of Statistics*, Vol. 19, No. 4, 1855-1868.

53. Z. Chen , C. Gu and G. Wahba (1989). Comments to 'Linear smoothers and additive models' by A. Buja, T. Hastie and R. Tibshirani, *Annals of Statistics*, Vol. 17, No. 2, 515-522.

54. C. Gu, D. M. Bates, Z. Chen and G. Wahba (1989). The computation of GCV functions through Householder tridiagonalization with applications to the fitting of interaction spline models, *SIAM J. on Matrix Analysis and Appli.*, **10**, No. 4, 457-480.

55. Z. Chen (1987). A Stepwise Approach for the Purely Periodic Interaction Spline Model *Commun. Statist. -Theory & Method,***16** (3), 877-895.

56. Y. Zhang and Z. Chen (1982). Optimal supplementary experiments, *Wuhan Daxue Xuebao.* (Chinese, English Summary.)

57. Z. Chen and J. Liu. Multiple Interval Mapping for Ordinal Traits Using Mixture GLIM. *Manuscript.*

Books

1. Z. Chen (2014). *Statistical Methods for QTL Mapping.* ISBN 978-1-4398-6830-0. Chapman & Hall/CRC, New York.

2. Z. Chen, Z. D. Bai and B. K. Sinha (2004). *Ranked Set Sampling: Theory and Applications.* ISBN 0-387-40263-2. Springer-Verlag, New York.

3. Z. Chen, J.T Zhang and F. Hu (2008). *Advances in Statistics.* World Scientific.