

统计学（理学）硕士

新生必读书目：

- (1) 《统计推断(第二版)》，George Casella，机械工业出版社
- (2) 《神经网络与机器学习, Simon Haykin，机械工业出版社
- (3) 《机器学习》，周志华，清华大学出版社
- (4) 《统计机器学习导论》，Masashi Sugiyama，机械工业出版社
- (5) 《An Introduction to Statistical Learning with Applications in R》，Gareth James, Trevor Hastie, Robert Tibshirani, Daniela Witten 编著，Springer
- (6) 《神经网络与深度学习》，Michael Nielsen（电子书）
- (7) 《Weak Convergence and Empirical Processes》，Aad van der vaart, Jon Wellner 编著，Springer
- (8) 《Dive into Deep Learning》，Aston Zhang, Zachary C. Lipton, Mu Li, Alexander J. Smola 编著（网上公开暂时只有手稿）
- (9) 统计计算 使用 R [Statistical Computing with R]. Mario Rizzo 著，胡锐，李义翻译。ISBN: 9787111553625.

经典文献推荐：

- [1] Tibshirani R . Regression shrinkage and selection via the lasso[J]. Journal of the Royal Statistical Society, Series B, 1996, 58(1).
- [2] Zou H . The adaptive LASSO and its oracle properties[J]. Journal of the American Statistical Association, 2006, 101(476):1418-1429.
- [3] Fan, J., & Li, R. (2001). Variable Selection via Nonconcave Penalized. Journal of the American Statistical Association, 96(456), 1348–1360.
- [4] Fan, J., & Lv, J. Sure Independence Screening for Ultrahigh Dimensional Feature Space[J]. Journal of the Royal Statistical Society, Series B, 2008, 70(5):849-911.
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- [6] Fan J, Han F, Liu H. Challenges of big data analysis[J]. National science review, 2014, 1(2): 293-314.
- [7] Fan J, Song R. Sure independence screening in generalized linear models with NP-dimensionality[J]. The Annals of Statistics, 2010, 38(6): 3567-3604.

[8] Cui H, Li R, Zhong W. Model-free feature screening for ultrahigh dimensional discriminant analysis[J]. Journal of the American Statistical Association, 2015, 110(510): 630-641.

[9] Bayes Factors. By Robert E. Kass and Adrian E. Raftery. Journal of the American Statistical Association, Volume 90, 1995 - Issue 430.

<https://www.stat.washington.edu/raftery/Research/PDF/kass1995.pdf>