Shusen Wang

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EDUCATION
- ◇ **PhD**, in 2016
  College of Computer Science and Technology, Zhejiang University, China.
  Advisor: Prof. Zhihua Zhang
- ◇ **Bachelor of Engineering**, in 2011
  Zhejiang University, China.

WORK EXPERIENCE
- ◇ 07/2016—Now: Postdoc, with Michael Mahoney.
  Department of Statistics, UC Berkeley.
- ◇ 05/2014—08/2015: Research intern, with Professor Tong Zhang.
  Baidu Big Data Lab, Beijing, China.
- ◇ 02/2012—08/2012: Research intern, Google Research, Beijing, China.
- ◇ 08/2011—02/2012: Intern, with Dr. Haixun Wang and Dr. Yangqiu Song.
  Microsoft Research Asia (MSRA), Beijing, China.

RESEARCH INTERESTS
- ◇ Machine learning
- ◇ Randomized numerical linear algebra

HONORS & AWARDS
- ◇ 2014   Baidu Scholarship, award to 8 Chinese students around the world
- ◇ 2013   Microsoft Research Asia Fellow, 10 winners out of over 100 candidates from 45 leading academic institutions in East Asia.
- ◇ 2012, 2013, 2014   National Scholarship for Graduate Students, three times.
- ◇ 2012   Scholarship Award for Excellent Doctoral Student Granted by Ministry of Education, 25 winners from all majors in Zhejiang University.
- ◇ 2011   Excellent Bachelor Thesis in Zhejiang University (100 from 5,000 students in all majors)

ACADEMIC SERVICE
- ◇ Reviewer of NIPS 2014, 2015, IJCAI 2015, Journal of Machine Learning Research.

JOURNAL PAPERS
- ◇ Towards More Efficient SPSD Matrix Approximation and CUR Matrix Decomposition.
  Shusen Wang, Zhihua Zhang, and Tong Zhang.
  Journal of Machine Learning Research, 17(210):1-49, 2016. (JMLR 2016).
- ◇ SPSD Matrix Approximation vis Column Selection: Theories, Algorithms, and Extensions.
  Shusen Wang, Luo Luo, and Zhihua Zhang.
  Journal of Machine Learning Research, 17(49):1-49, 2016. (JMLR 2016).
- ◇ Improving CUR Matrix Decomposition and Nyström Approximation via Adaptive Sampling.
  Shusen Wang and Zhihua Zhang.
  Journal of Machine Learning Research, 14: 2729-2769, 2013. (JMLR 2013).

◇ EP-GIG Priors and Applications in Bayesian Sparse Learning.
Zhihua Zhang, **Shusen Wang**, Dehua Liu, and Michael I. Jordan.
Journal of Machine Learning Research, 13: 2031-2061, 2012. (JMLR 2012).

CONFERENCE PAPERS

◇ Open Domain Short Text Conceptualization: A Generative + Descriptive Modeling Approach.
Yangqiu Song, **Shusen Wang**, and Haixun Wang.
In *the International Joint Conference on Artificial Intelligence*, 2015. (IJCAI 2015).

◇ Improving the Modified Nyström Method Using Spectral Shifting.
Shusen Wang, Chao Zhang, Hui Qian, and Zhihua Zhang.
In *Proceedings of the 20th ACM SIGKDD Conference on Knowledge Discovery and Data Mining*, 2014. (KDD 2014).

◇ Efficient Algorithms and Error Analysis for the Modified Nyström Method.
Shusen Wang and Zhihua Zhang.
In *Proceedings of the 17th International Conference on Artificial Intelligence and Statistics*, JMLR W&CP, 2014. (AISTATS 2014).

◇ Making Fisher Discriminant Analysis Scalable.
Bojun Tu, Zhihua Zhang, **Shusen Wang**, and Hui Qian.
In *the International Conference on Machine Learning*, 2014. (ICML 2014).

◇ Exact Subspace Clustering in Linear Time.
Shusen Wang, Bojun Tu, Congfu Xu, and Zhihua Zhang.
In *the 28th AAAI Conference on Artificial Intelligence*, 2014. (AAAI 2014).

◇ Using The Matrix Ridge Approximation to Speedup Determinantal Point Processes Sampling Algorithms.
Shusen Wang, Chao Zhang, Hui Qian, and Zhihua Zhang.
In *the 28th AAAI Conference on Artificial Intelligence*, 2014. (AAAI 2014).

◇ Transfer Understanding from Head Queries to Tail Queries.
Yangqiu Song, Haixun Wang, Weizhu Chen, and **Shusen Wang**.
In *ACM International Conference on Information and Knowledge Management*, 2014. (CIKM 2014).

◇ Nonconvex Relaxation Approaches to Robust Matrix Recovery.
Shusen Wang, Dehua Liu, and Zhihua Zhang.
In *the International Joint Conference on Artificial Intelligence*, 2013. (IJCAI 2013).

◇ A Scalable CUR Matrix Decomposition Algorithm: Lower Time Complexity and Tighter Bound.
Shusen Wang and Zhihua Zhang.
In *Advances in Neural Information Processing Systems 25* , 2012. (NIPS 2012).

◇ Colorization by Matrix Completion.
Shusen Wang and Zhihua Zhang.
In *the 26th AAAI Conference on Artificial Intelligence*, 2012. (AAAI 2012).

◇ Efficient Subspace Segmentation via Quadratic Programming.
Shusen Wang and Xiaotong Yuan, Tiansheng Yao, Shuicheng Yan, Jialie Shen.
In *the 25th AAAI Conference on Artificial Intelligence*, 2011. (AAAI 2011).

PREPRINTS

◇ Improved Analyses of the Randomized Power Method and Block Lanczos Method.
Shusen Wang, Zhihua Zhang, and Tong Zhang.
arXiv:1508.06429, 2015.