Lijun Zhang — Resume

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Research Interests

Machine Learning, Optimization

Academic Appointments

Professor Dec., 2020 – present
Research Professor Dec., 2019 – Dec., 2020

School of Artificial Intelligence, Nanjing University

Associate Professor Apr., 2014 – Dec., 2019

Department of Computer Science and Technology, Nanjing University

Postdoctoral Researcher Aug., 2012 – Apr., 2014

Department of Computer Science and Engineering, Michigan State University

- Advisor: Prof. Rong Jin

Education

Zhejiang University, Hangzhou, China

Ph.D., Computer Science and Technology, Sep., 2007 – Jun., 2012

- Advisor: Prof. Chun Chen

B.E., Software Engineering, Sep., 2003 – Jun., 2007

Michigan State University, East Lansing, USA

Visiting Student, Department of Computer Science and Engineering, Jun., 2011 – Dec., 2011

- Advisor: Prof. Rong Jin

Honors and Awards

- 2021, NSFC Excellent Young Scientists Fund
- 2019, Microsoft Research Asia Collaborative Research 2019 Grant Award
- 2018, DAMO Academy Young Fellow
- 2017, Young Elite Scientist Sponsorship Program by CAST
- 2016, Young Talent Development Program of the CCF
- 2012, AAAI-12 Outstanding Paper Award
- 2011, Chu Kochen Award (Highest Honour of Zhejiang University)
- 2010, ACM Multimedia 2010 Best Paper Award Runner-up
- 2010, Scholarship Award for Excellent Doctoral Student Granted by Ministry of Education
- 2007, 2012, Excellent Graduate of Zhejiang Province
- 2007, 2012, Excellent Graduate of Zhejiang University

Professional Service

Editorial Boards

- Managing Editor, *Machine Learning*, Since Jun., 2025
- Action Editor, *Machine Learning*, Jun., 2021 – Jun., 2025
- Action Editor, *Transactions on Machine Learning Research*, Since Dec., 2021

- Associate Editor, *Neurocomputing*, Mar., 2021 – Aug., 2025
- Topic Editor, *Remote Sensing*, Feb., 2021 – Aug., 2021
- Editorial Board Reviewer, *Journal of Machine Learning Research*, Since Jun., 2020

Area Chair
- The 43rd International Conference on Machine Learning (ICML 2026)
- The 42nd International Conference on Machine Learning (ICML 2025)
- The 41st International Conference on Machine Learning (ICML 2024)
- The 40th International Conference on Machine Learning (ICML 2023)
- The 39th International Conference on Machine Learning (ICML 2022)
- The 14th International Conference on Learning Representations (ICLR 2026)
- The 13th International Conference on Learning Representations (ICLR 2025)
- The 12th International Conference on Learning Representations (ICLR 2024)
- The 39th Annual Conference on Neural Information Processing Systems (NeurIPS 2025)
- The 38th Annual Conference on Neural Information Processing Systems (NeurIPS 2024)
- The 37th Annual Conference on Neural Information Processing Systems (NeurIPS 2023)
- The 36th Annual Conference on Neural Information Processing Systems (NeurIPS 2022)
- The 35th Annual Conference on Neural Information Processing Systems (NeurIPS 2021)
- The 40th AAAI Conference on Artificial Intelligence (AAAI 2026)
- The 34th International Joint Conference on Artificial Intelligence (IJCAI 2025)
- The 30th International Joint Conference on Artificial Intelligence (IJCAI 2021)
- The 26th International Joint Conference on Artificial Intelligence (IJCAI 2017)
- The 3rd Chinese Conference on Pattern Recognition and Computer Vision (PRCV 2020)
- The CAAI International Conference on Artificial Intelligence (CICAI 2023)
- The CAAI International Conference on Artificial Intelligence (CICAI 2022)
- The CAAI International Conference on Artificial Intelligence (CICAI 2021)

Senior Program Committee Member
- The 33rd International Joint Conference on Artificial Intelligence (IJCAI 2024)
- The 31st International Joint Conference on Artificial Intelligence (IJCAI 2022)
- The 34th AAAI Conference on Artificial Intelligence (AAAI 2020)
- The 33rd AAAI Conference on Artificial Intelligence (AAAI 2019)
- The 29th International Conference on Artificial Intelligence (IJCAI 2020)
- The 28th International Conference on Artificial Intelligence (IJCAI 2019)
- The 27th International Conference on Artificial Intelligence (IJCAI 2018)

Program Committee Member
- The 38th International Conference on Machine Learning (ICML 2021)
- The 37th International Conference on Machine Learning (ICML 2020)
- The 36th International Conference on Machine Learning (ICML 2019)
- The 35th International Conference on Machine Learning (ICML 2018)
- The 33rd International Conference on Machine Learning (ICML 2016)
- The 26th ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD 2020)
- The 25th ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD 2019)
- The 24th ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD 2018)

- The 22nd ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD 2016)
- The 21st ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD 2015)
- The 36th AAAI Conference on Artificial Intelligence (AAAI 2022)
- The 35th AAAI Conference on Artificial Intelligence (AAAI 2021)
- The 32nd AAAI Conference on Artificial Intelligence (AAAI 2018)
- The 31st AAAI Conference on Artificial Intelligence (AAAI 2017)
- The 29th AAAI Conference on Artificial Intelligence (AAAI 2015)
- The 26th AAAI Conference on Artificial Intelligence (AAAI 2012)
- The 25th International Joint Conference on Artificial Intelligence (IJCAI 2016)
- The 24th International Joint Conference on Artificial Intelligence (IJCAI 2015)
- The 23rd International Joint Conference on Artificial Intelligence (IJCAI 2013)
- The 23rd ACM International Conference on Multimedia (MM 2015)
- The 22nd ACM International Conference on Multimedia (MM 2014)

Reviewer

- The IEEE/CVF Conference on Computer Vision and Pattern Recognition 2026 (CVPR 2026)
- The IEEE/CVF Conference on Computer Vision and Pattern Recognition 2025 (CVPR 2025)
- The IEEE/CVF International Conference on Computer Vision 2025 (ICCV 2025)
- The 34th Annual Conference on Neural Information Processing Systems (NeurIPS 2020)
- The 33rd Annual Conference on Neural Information Processing Systems (NeurIPS 2019)
- The 32nd Annual Conference on Neural Information Processing Systems (NeurIPS 2018)
- The 31st Annual Conference on Neural Information Processing Systems (NIPS 2017)
- The 30th Annual Conference on Neural Information Processing Systems (NIPS 2016)
- The 29th Annual Conference on Neural Information Processing Systems (NIPS 2015)
- The 28th Annual Conference on Neural Information Processing Systems (NIPS 2014)
- The 27th Annual Conference on Neural Information Processing Systems (NIPS 2013)
- The 21st International Conference on Artificial Intelligence and Statistics (AISTATS 2018)
- The 20th International Conference on Artificial Intelligence and Statistics (AISTATS 2017)
- The 19th International Conference on Artificial Intelligence and Statistics (AISTATS 2016)
- IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI)
- IEEE Transactions on Knowledge and Data Engineering (TKDE)
- IEEE Transactions on Multimedia (TMM)
- Transactions on Intelligent Systems and Technology (TIST)
- IEEE Transactions on Systems, Man, and Cybernetics, Part B: Cybernetics (TSMCB)
- IEEE Transactions on Systems, Man, and Cybernetics, Part C: Applications and Reviews (TSMCC)
- IEEE Transactions on Cybernetics
- IEEE Transactions on Neural Networks and Learning Systems (TNNLS)
- IEEE Transactions on Big Data (TBD)
- ACM Transactions on Knowledge Discovery from Data (TKDD)
- Machine Learning, Pattern Recognition
- Information Sciences, Neural Networks
- Neurocomputing, Pattern Recognition Letters
- Signal Processing, Knowledge-Based Systems

- Journal of Scientific Computing (JOMP)
- Journal of Selected Topics in Signal Processing (JSTSP)
- Journal of Computer Science and Technology (JCST)
- SCIENCE CHINA Information Sciences

Program Co-Chair
- The 12th Vision and Learning Seminar (VALSE 2022)
- The 19th China Symposium on Machine Learning and Applications (MLA 2021)

Workshop Co-Chair
- The 11th Vision and Learning Seminar (VALSE 2021)
- The 9th Vision and Learning Seminar (VALSE 2019)

APR Co-Chair
- The 15th Vision and Learning Seminar (VALSE 2025)
- The 10th Vision and Learning Seminar (VALSE 2020)

Publications Co-Chair
- The 9th China Conference on Data Mining (CCDM 2022)

Organizing Committee Member
- The 16th China Symposium on Machine Learning and Applications (MLA 2018)

Book

1. Zhi-Hua Zhou, Wei Wang, Wei Gao, and **Lijun Zhang**. Introduction to the Theory of Machine Learning (In Chinese). China Machine Press, 2020.

Conference Publications

1. Sijia Chen, Yibo Wang, Yi-Feng Wu, Qing-Guo Chen, Zhao Xu, Weihua Luo, Kaifu Zhang, and **Lijun Zhang**. Advancing Tool-Augmented Large Language Models: Integrating Insights from Errors in Inference Trees. In *Advances in Neural Information Processing Systems 37* (**NeurIPS**), to appear, 2024.

2. Wenhao Yang, Yibo Wang, Peng Zhao, and **Lijun Zhang**. Universal Online Convex Optimization with 1 Projection per Round. In *Advances in Neural Information Processing Systems 37* (**NeurIPS**), to appear, 2024.

3. Yibo Wang, Sijia Chen, Wei Jiang, Wenhao Yang, Yuanyu Wan, and **Lijun Zhang**. Online Composite Optimization Between Stochastic and Adversarial Environments. In *Advances in Neural Information Processing Systems 37* (**NeurIPS**), to appear, 2024.

4. Zhipan Xu, and **Lijun Zhang**. Online Non-convex Learning in Dynamic Environments. In *Advances in Neural Information Processing Systems 37* (**NeurIPS**), to appear, 2024.

5. Yuanyu Wan, Chang Yao, Mingli Song, and **Lijun Zhang**. Improved Regret for Bandit Convex Optimization with Delayed Feedback. In *Advances in Neural Information Processing Systems 37* (**NeurIPS**), to appear, 2024.

6. Wei Jiang, Sifan Yang, Yibo Wang, and **Lijun Zhang**. Adaptive Variance Reduction for Stochastic Optimization under Weaker Assumptions. In *Advances in Neural Information Processing Systems 37* (**NeurIPS**), to appear, 2024.

7. Wei Jiang, Sifan Yang, Wenhao Yang, and **Lijun Zhang**. Efficient Sign-Based Optimization: Accelerating Convergence via Variance Reduction. In *Advances in Neural Information Processing Systems 37* (**NeurIPS**), to appear, 2024.

8. Yuanyu Wan, Tong Wei, Mingli Song, and **Lijun Zhang**. Nearly Optimal Regret for Decentralized Online Convex Optimization. In *Proceedings of the 37th Conference on Learning Theory* (**COLT**), pp. 4862–4888, 2024.

9. **Lijun Zhang**, Haomin Bai, Wei-Wei Tu, Ping Yang, and Yao Hu. Efficient Stochastic Approximation of Minimax Excess Risk Optimization. In *Proceedings of the 41st International Conference on Machine Learning* (**ICML**), pp. 58599–58630, 2024.

10. Dingzhi Yu, Yunuo Cai, Wei Jiang, and **Lijun Zhang**. Efficient Algorithms for Empirical Group Distributionally Robust Optimization and Beyond. In *Proceedings of the 41st International Conference on Machine Learning* (**ICML**), pp. 57384–57414, 2024.

11. Wei Jiang, Sifan Yang, Wenhao Yang, Yibo Wang, Yuanyu Wan, and **Lijun Zhang**. Projection-Free Variance Reduction Methods for Stochastic Constrained Multi-Level Compositional Optimization. In *Proceedings of the 41st International Conference on Machine Learning* (**ICML**), pp. 21962–21987, 2024.

12. Langqi Liu, Yibo Wang, and **Lijun Zhang**. High-Probability Bound for Non-Smooth Non-Convex Stochastic Optimization with Heavy Tails. In *Proceedings of the 41st International Conference on Machine Learning* (**ICML**), pp. 32122–32138, 2024.

13. Zi-Hao Qiu, Siqi Guo, Mao Xu, Tuo Zhao, **Lijun Zhang**, and Tianbao Yang. To Cool or not to Cool? Temperature Network Meets Large Foundation Models via DRO. In *Proceedings of the 41st International Conference on Machine Learning* (**ICML**), pp. 41604–41643, 2024.

14. Wenhao Yang, Wei Jiang, Yibo Wang, Ping Yang, Yao Hu, and **Lijun Zhang**. Small-loss Adaptive Regret for Online Convex Optimization. In *Proceedings of the 41st International Conference on Machine Learning* (**ICML**), pp. 56156–56195, 2024.

15. Yuanyu Wan, Chang Yao, Mingli Song, and **Lijun Zhang**. Non-stationary Online Convex Optimization with Arbitrary Delays. In *Proceedings of the 41st International Conference on Machine Learning* (**ICML**), pp. 49991–50011, 2024.

16. Zhen-Hua Zhuang, and **Lijun Zhang**. Soft Contrastive Learning for Implicit Feedback Recommendations. In *Advances in Knowledge Discovery and Data Mining* (**PAKDD**), pp. 219–230, 2024.

17. Wenhao Yang, Yingchun Jian, Yibo Wang, Shiyin Lu, Lei Shen, Bing Wang, Haihong Tang, and **Lijun Zhang**. Not All Embeddings are Created Equal: Towards Robust Cross-domain Recommendation via Contrastive Learning. In *Proceedings of the ACM Web Conference 2024* (**WWW**), pp. 3195–3206, 2024.

18. Yibo Wang, Wenhao Yang, Wei Jiang, Shiyin Lu, Bing Wang, Haihong Tang, Yuanyu Wan, and **Lijun Zhang**. Non-stationary Projection-Free Online Learning with Dynamic and Adaptive Regret Guarantees. In *Proceedings of the 38th AAAI Conference on Artificial Intelligence* (**AAAI**), pp. 15671–15679, 2024.

19. **Lijun Zhang**, Peng Zhao, Zhen-Hua Zhuang, Tianbao Yang, and Zhi-Hua Zhou. Stochastic Approximation Approaches to Group Distributionally Robust Optimization. In *Advances in Neural Information Processing Systems 36* (**NeurIPS**), pp. 52490–52522, 2023.

20. Bo Xue, Yimu Wang, Yuanyu Wan, Jinfeng Yi, and **Lijun Zhang**. Efficient Algorithms for Generalized Linear Bandits with Heavy-tailed Rewards. In *Advances in Neural Information Processing Systems 36* (**NeurIPS**), pp. 70880–70891, 2023.

21. Zhenyao Zhang, and **Lijun Zhang**. NeCa: Network Calibration for Class Incremental Learning. In *Pattern Recognition* (**ACPR**), pp. 385–399, 2023.

22. Yuanyu Wan, **Lijun Zhang**, and Mingli Song. Improved Dynamic Regret for Online Frank-Wolfe. In *Proceedings of the 36th Annual Conference on Learning Theory* (**COLT**), pp. 3304–3327, 2023.

23. Yutian Gou, Jinfeng Yi, and **Lijun Zhang**. Stochastic Graphical Bandits with Heavy-Tailed Rewards. In *Proceedings of the 39th Conference on Uncertainty in Artificial Intelligence* (**UAI**), pp. 734–744, 2023.

24. Sijia Chen, Wei-Wei Tu, Peng Zhao, and **Lijun Zhang**. Optimistic Online Mirror Descent for Bridging Stochastic and Adversarial Online Convex Optimization. In *Proceedings of the 40th International Conference on Machine Learning* (**ICML**), pp. 5002–5035, 2023.

25. Wei Jiang, Jiayu Qin, Lingyu Wu, Changyou Chen, Tianbao Yang, and **Lijun Zhang**. Learning Unnormalized Statistical Models via Compositional Optimization. In *Proceedings of the 40th International Conference on Machine Learning* (**ICML**), pp. 15105–15124, 2023.

26. Zi-Hao Qiu, Quanqi Hu, Zhuoning Yuan, Denny Zhou, **Lijun Zhang**, and Tianbao Yang. Not All Semantics are Created Equal: Contrastive Self-supervised Learning with Automatic Temperature Individualization. In *Proceedings of the 40th International Conference on Machine Learning* (**ICML**), pp. 28389–28421, 2023.

27. Quanqi Hu, Zi-Hao Qiu, Zhishuai Guo, **Lijun Zhang**, and Tianbao Yang. Blockwise Stochastic Variance-Reduced Methods with Parallel Speedup for Multi-Block Bilevel Optimization. In *Proceedings of the 40th International Conference on Machine Learning* (**ICML**), pp. 13550–13583, 2023.

28. Yibo Wang, Yuanyu Wan, Shimao Zhang, and **Lijun Zhang**. Distributed Projection-free Online Learning for Smooth and Convex Losses. In *Proceedings of the 37th AAAI Conference on Artificial Intelligence* (**AAAI**), pp. 10226–10234, 2023.

29. **Lijun Zhang**, Wei Jiang, Jinfeng Yi, and Tianbao Yang. Smoothed Online Convex Optimization Based on Discounted-Normal-Predictor. In *Advances in Neural Information Processing Systems 35* (**NeurIPS**), pp. 4928–4942, 2022.

30. Yuanyu Wan, Wei-Wei Tu, and **Lijun Zhang**. Online Frank-Wolfe with Arbitrary Delays. In *Advances in Neural Information Processing Systems 35* (**NeurIPS**), pp. 19703–19715, 2022.

31. Wei Jiang, Gang Li, Yibo Wang, **Lijun Zhang**, and Tianbao Yang. Multi-block-Single-probe Variance Reduced Estimator for Coupled Compositional Optimization. In *Advances in Neural Information Processing Systems 35* (**NeurIPS**), pp. 32499–32511, 2022.

32. Peng Zhao, Yan-Feng Xie, **Lijun Zhang**, and Zhi-Hua Zhou. Efficient Methods for Non-stationary Online Learning. In *Advances in Neural Information Processing Systems 35* (**NeurIPS**), pp. 11573–11585, 2022.

33. Shiyin Lu, Yuan Miao, Ping Yang, Yao Hu, and **Lijun Zhang**. Non-stationary Dueling Bandits for Online Learning to Rank. In *Proceedings of the 6th APWeb and WAIM Joint International Conference on Web and Big Data* (**APWeb-WAIM**), Part II, pp. 166–174, 2022.

34. **Lijun Zhang**, Guanghui Wang, Jinfeng Yi, and Tianbao Yang. A Simple yet Universal Strategy for Online Convex Optimization. In *Proceedings of the 39th International Conference on Machine Learning* (**ICML**), pp. 26605–26623, 2022.

35. Wei Jiang, Bokun Wang, Yibo Wang, **Lijun Zhang**, and Tianbao Yang. Optimal Algorithms for Stochastic Multi-Level Compositional Optimization. In *Proceedings of the 39th International Conference on Machine Learning* (**ICML**), pp. 10195–10216, 2022.

36. Zi-Hao Qiu, Quanqi Hu, Yongjian Zhong, **Lijun Zhang**, and Tianbao Yang. Large-scale Stochastic Optimization of NDCG Surrogates for Deep Learning with Provable Convergence. In *Proceedings of the 39th International Conference on Machine Learning* (**ICML**), pp. 18122–18152, 2022.

37. Zhuoning Yuan, Yuexin Wu, Zi-Hao Qiu, Xianzhi Du, **Lijun Zhang**, Denny Zhou, and Tianbao Yang. Provable Stochastic Optimization for Global Contrastive Learning: Small Batch Does Not Harm Performance. In *Proceedings of the 39th International Conference on Machine Learning* (**ICML**), pp. 25760–25782, 2022.

38. Yingchun Jian, Jinfeng Yi, and **Lijun Zhang**. Adaptive Feature Generation for Online Continual Learning from Imbalanced Data. In *Advances in Knowledge Discovery and Data Mining* (**PAKDD**), pp. 276–289, 2022.

39. Guanghui Wang, Ming Yang, **Lijun Zhang**, and Tianbao Yang. Momentum Accelerates the Convergence of Stochastic AUPRC Maximization. In *Proceedings of The 25th International Conference on Artificial Intelligence and Statistics* (**AISTATS**), pp. 3753–3771, 2022.

40. Shiyin Lu, Yu-Hang Zhou, Jing-Cheng Shi, Wenya Zhu, Qingtao Yu, Qing-Guo Chen, Qing Da, and **Lijun Zhang**. Non-stationary Continuum-armed Bandits for Online Hyperparameter Optimization. In *Proceedings of the 15th ACM International Conference on Web Search and Data Mining* (**WSDM**), pp. 618–627, 2022.

41. **Lijun Zhang**, Wei Jiang, Shiyin Lu, and Tianbao Yang. Revisiting Smoothed Online Learning. In *Advances in Neural Information Processing Systems 34* (**NeurIPS**), pp. 13599–13612, 2021.

42. **Lijun Zhang**, Guanghui Wang, Wei-Wei Tu, Wei Jiang, and Zhi-Hua Zhou. Dual Adaptivity: A Universal Algorithm for Minimizing the Adaptive Regret of Convex Functions. In *Advances in Neural Information Processing Systems 34* (**NeurIPS**), pp. 24968–24980, 2021.

43. Guanghui Wang, Yuanyu Wan, Tianbao Yang, and **Lijun Zhang**. Online Convex Optimization with Continuous Switching Constraint. In *Advances in Neural Information Processing Systems 34* (**NeurIPS**), pp. 28636–28647, 2021.

44. Zi-Hao Qiu and Ying-Chun Jian and Qing-Guo Chen, and **Lijun Zhang**. Learning to Augment Imbalanced Data for Re-Ranking Models. In *Proceedings of the 30th ACM International Conference on Information and Knowledge Management* (**CIKM**), pp. 1478–1487, 2021.

45. Yimu Wang, Bo Xue, Quan Cheng, Yuhui Chen, and **Lijun Zhang**. Deep Unified Cross-Modality Hashing by Pairwise Data Alignment. In *Proceedings of the 30th International Joint Conference on Artificial Intelligence* (**IJCAI**), pp. 1129–1135, 2021.

46. Peng Zhao, and **Lijun Zhang**. Improved Analysis for Dynamic Regret of Strongly Convex and Smooth Functions. In *Proceedings of the 3rd Conference on Learning for Dynamics and Control* (**L4DC**), pp. 48–59, 2021.

47. Shiyin Lu, Guanghui Wang, and **Lijun Zhang**. Stochastic Graphical Bandits with Adversarial Corruptions. In *Proceedings of the 35th AAAI Conference on Artificial Intelligence* (**AAAI**), pp. 8749–8757, 2021.

48. Shiyin Lu, Yao Hu, and **Lijun Zhang**. Stochastic Bandits with Graph Feedback in Non-Stationary Environments. In *Proceedings of the 35th AAAI Conference on Artificial Intelligence* (**AAAI**), pp. 8758–8766, 2021.

49. Yuanyu Wan, and **Lijun Zhang**. Approximate Multiplication of Sparse Matrices with Limited Space. In *Proceedings of the 35th AAAI Conference on Artificial Intelligence* (**AAAI**), pp. 10058–10066, 2021.

50. Yuanyu Wan, and **Lijun Zhang**. Projection-free Online Learning over Strongly Convex Sets. In *Proceedings of the 35th AAAI Conference on Artificial Intelligence* (**AAAI**), pp. 10067–10075, 2021.

51. Yuanyu Wan, Bo Xue, and **Lijun Zhang**. Projection-Free Online Learning in Dynamic Environments. In *Proceedings of the 35th AAAI Conference on Artificial Intelligence* (**AAAI**), pp. 10076–10084, 2021.

52. Peng Zhao, Yu-Jie Zhang, **Lijun Zhang**, and Zhi-Hua Zhou. Dynamic Regret of Convex and Smooth Functions. In *Advances in Neural Information Processing Systems 33* (**NeurIPS**), pp. 12510–12520, 2020.

53. Pengcheng Li, Runze Li, Qing Da, An-Xiang Zeng, and **Lijun Zhang**. Improving Multi-Scenario Learning to Rank in E-Commerce by Exploiting Task Relationships in the Label Space. In *Proceedings of the 29th ACM International Conference on Information and Knowledge Management* (**CIKM**), pp. 2605–2612, 2020.

54. Yimu Wang, Shiyin Lu, and **Lijun Zhang**. Searching Privately by Imperceptible Lying: A Novel Private Hashing Method with Differential Privacy. In *Proceedings of the 28th ACM International Conference on Multimedia* (**ACM Multimedia**), pp. 2700–2709, 2020.

55. Yimu Wang, Xiu-Shen Wei, Bo Xue, and **Lijun Zhang**. Piecewise Hashing: A Deep Hashing Method for Large-Scale Fine-Grained Search. In *Proceedings of the 3rd Chinese Conference on Pattern Recognition and Computer Vision* (**PRCV**), pp. 432–444, 2020.

56. Yuanyu Wan, Wei-Wei Tu, and **Lijun Zhang**. Projection-free Distributed Online Convex Optimization with $O(\sqrt{T})$ Communication Complexity. In *Proceedings of the 37th International Conference on Machine Learning* (**ICML**), pp. 9818–9828, 2020.

57. Yan Yan, Yi Xu, **Lijun Zhang**, Xiaoyu Wang, and Tianbao Yang. Stochastic Optimization for Non-convex Inf-Projection Problems. In *Proceedings of the 37th International Conference on Machine Learning* (**ICML**), pp. 10660–10669, 2020.

58. **Lijun Zhang**. Online Learning in Changing Environments. In *Proceedings of the 29th International Joint Conference on Artificial Intelligence* (**IJCAI**), Early Career, pp. 5178–5182, 2020.

59. Bo Xue, Guanghui Wang, Yimu Wang, and **Lijun Zhang**. Nearly Optimal Regret for Stochastic Linear Bandits with Heavy-Tailed Payoffs. In *Proceedings of the 29th International Joint Conference on Artificial Intelligence* (**IJCAI**), pp. 2936–2942, 2020.

60. **Lijun Zhang**, Shiyin Lu, and Tianbao Yang. Minimizing Dynamic Regret and Adaptive Regret Simultaneously. In *Proceedings of the 23rd International Conference on Artificial Intelligence and Statistics* (**AISTATS**), pp. 309–319, 2020.

61. Peng Zhao, **Lijun Zhang**, Yuan Jiang, and Zhi-Hua Zhou. A Simple Approach for Non-stationary Linear Bandits. In *Proceedings of the 23rd International Conference on Artificial Intelligence and Statistics* (**AISTATS**), pp. 746–755, 2020.

62. Peng Zhao, Guanghui Wang, **Lijun Zhang**, and Zhi-Hua Zhou. Bandit Convex Optimization in Non-stationary Environments. In *Proceedings of the 23rd International Conference on Artificial Intelligence and Statistics* (**AISTATS**), pp. 1508–1518, 2020.

63. Yimu Wang, Ren-Jie Song, Xiu-Shen Wei, and **Lijun Zhang**. An Adversarial Domain Adaptation Network for Cross-Domain Fine-Grained Recognition. In *Proceedings of the 2020 IEEE Winter Conference on Applications of Computer Vision* (**WACV**), pp. 1217–1225, 2020.

64. Guanghui Wang, Shiyin Lu, Weiwei Tu, and **Lijun Zhang**. SAdam: A Variant of Adam for Strongly Convex Functions. In *International Conference on Learning Representations* (**ICLR**), 2020.

65. Guanghui Wang, Shiyin Lu, Yao Hu, and **Lijun Zhang**. Adapting to Smoothness: A More Universal Algorithm for Online Convex Optimization. In *Proceedings of the 34th AAAI Conference on Artificial Intelligence* (**AAAI**), pp. 6162–6169, 2019.

66. Shiyin Lu, Guanghui Wang, Yao Hu, and **Lijun Zhang**. Multi-Objective Generalized Linear Bandits. In *Proceedings of the 28th International Joint Conference on Artificial Intelligence* (**IJCAI**), pp. 3080–3086, 2019.

67. Pengcheng Li, Jinfeng Yi, Bowen Zhou, and **Lijun Zhang**. Improving the Robustness of Deep Neural Networks via Adversarial Training with Triplet Loss. In *Proceedings of the 28th International Joint Conference on Artificial Intelligence* (**IJCAI**), pp. 2909–2915, 2019.

68. Guanghui Wang, Shiyin Lu, and **Lijun Zhang**. Adaptivity and Optimality: A Universal Algorithm for Online Convex Optimization. In *Proceedings of 35th Conference on Uncertainty in Artificial Intelligence* (**UAI**), pp. 659–668, 2019.

69. **Lijun Zhang**, and Zhi-Hua Zhou. Stochastic Approximation of Smooth and Strongly Convex Functions: Beyond the $O(1/T)$ Convergence Rate. In *Proceedings of the 32nd Annual Conference on Learning Theory* (**COLT**), pp. 3160–3179, 2019.

70. **Lijun Zhang**, Tie-Yan Liu, and Zhi-Hua Zhou. Adaptive Regret of Convex and Smooth Functions. In *Proceedings of the 36th International Conference on Machine Learning* (**ICML**), pp. 7414–7423, 2019.

71. Shiyin Lu, Guanghui Wang, Yao Hu, and **Lijun Zhang**. Optimal Algorithms for Lipschitz Bandits with Heavy-tailed Rewards. In *Proceedings of the 36th International Conference on Machine Learning* (**ICML**), pp. 4154–4163, 2019.

72. **Lijun Zhang**, and Zhi-Hua Zhou. ℓ_1-regression with Heavy-tailed Distributions. In *Advances in Neural Information Processing Systems 31* (**NeurIPS**), pp. 1076–1086, 2018.

73. **Lijun Zhang**, Shiyin Lu, and Zhi-Hua Zhou. Adaptive Online Learning in Dynamic Environments. In *Advances in Neural Information Processing Systems 31* (**NeurIPS**), pp. 1323–1333, 2018.

74. Mingrui Liu, Xiaoxuan Zhang, **Lijun Zhang**, Rong Jin, and Tianbao Yang. Fast Rates of ERM and Stochastic Approximation: Adaptive to Error Bound Conditions. In *Advances in Neural Information Processing Systems 31* (**NeurIPS**), pp. 4678–4689, 2018.

75. Pengcheng Li, Jinfeng Yi, and **Lijun Zhang**. Query-Efficient Black-Box Attack by Active Learning. In *Proceedings of the 18th IEEE International Conference on Data Mining* (**ICDM**), pp. 1200–1205, 2018.

76. **Lijun Zhang**, Tianbao Yang, Rong Jin, and Zhi-Hua Zhou. Dynamic Regret of Strongly Adaptive Methods. In *Proceedings of the 35th International Conference on Machine Learning* (**ICML**), pp. 5882–5891, 2018.

77. Guanghui Wang, Dakuan Zhao, and **Lijun Zhang**. Minimizing Adaptive Regret with One Gradient per Iteration. In *Proceedings of the 27th International Joint Conference on Artificial Intelligence* (**IJCAI**), pp. 2762–2768, 2018.

78. Yuanyu Wan, Nan Wei, and **Lijun Zhang**. Efficient Adaptive Online Learning via Frequent Directions. In *Proceedings of the 27th International Joint Conference on Artificial Intelligence* (**IJCAI**), pp. 2748–2754, 2018.

79. Yuanyu Wan, and **Lijun Zhang**. Accelerating Adaptive Online Learning by Matrix Approximation. In *Advances in Knowledge Discovery and Data Mining* (**PAKDD**), pp. 405–417, 2018.

80. Tianbao Yang, Zhe Li, and **Lijun Zhang**. A Simple Analysis for Exp-concave Empirical Minimization with Arbitrary Convex Regularizer. In *Proceedings of the 21st International Conference on Artificial Intelligence and Statistics* (**AISTATS**), pp. 445–453, 2018.

81. Haipeng Dai, Ke Sun, Alex X. Liu, **Lijun Zhang**, Jiaqi Zheng, and Guihai Chen. Charging Task Scheduling for Directional Wireless Charger Networks. In *Proceedings of the 47th International Conference on Parallel Processing* (**ICPP**), 2018.

82. **Lijun Zhang**, Tianbao Yang, Jinfeng Yi, Rong Jin, and Zhi-Hua Zhou. Improved Dynamic Regret for Non-degenerate Functions. In *Advance in Neural Information Processing Systems 30* (**NIPS**), pp. 732–741, 2017.

83. Bo-Jian Hou, **Lijun Zhang**, and Zhi-Hua Zhou. Learning with Feature Evolvable Streams. In *Advance in Neural Information Processing Systems 30* (**NIPS**), pp. 1416–1426, 2017.

84. Jinfeng Yi, Cho-Jui Hsieh, Kush R. Varshney, **Lijun Zhang**, and Yao Li. Scalable Demand-Aware Recommendation. In *Advance in Neural Information Processing Systems 30* (**NIPS**), pp. 2409–2418, 2017.

85. **Lijun Zhang**, Tianbao Yang, and Rong Jin. Empirical Risk Minimization for Stochastic Convex Optimization: $O(1/n)$- and $O(1/n^2)$-type of Risk Bounds. In *Proceedings of the 30th Conference on Learning Theory* (**COLT**), pp. 1954–1979, 2017.

86. Tianbao Yang, Qihang Lin, and **Lijun Zhang**. A Richer Theory of Convex Constrained Optimization with Reduced Projections and Improved Rates. In *Proceedings of the 34th International Conference on Machine Learning* (**ICML**), pp. 3901–3910, 2017.

87. Xinyu Yan, **Lijun Zhang**, and Wu-Jun Li. Semi-Supervised Deep Hashing with a Bipartite Graph. In *Proceedings of the 26th International Joint Conference on Artificial Intelligence* (**IJCAI**), pp. 3238–3244, 2017.

88. Bo-Jian Hou, **Lijun Zhang**, and Zhi-Hua Zhou. Storage Fit Learning with Unlabeled Data. In *Proceedings of the 26th International Joint Conference on Artificial Intelligence* (**IJCAI**), pp. 1844–1850, 2017.

89. Yichi Xiao, Zhe Li, Tianbao Yang, and **Lijun Zhang**. SVD-free Convex-Concave Approaches for Nuclear Norm Regularization. In *Proceedings of the 26th International Joint Conference on Artificial Intelligence* (**IJCAI**), pp. 3126–3132, 2017.

90. Jie Zhang, and **Lijun Zhang**. Efficient Stochastic Optimization for Low-Rank Distance Metric Learning. In *Proceedings of the 31st AAAI Conference on Artificial Intelligence* (**AAAI**), pp. 933–939, 2017.

91. Zhe Li, Tianbao Yang, **Lijun Zhang**, and Rong Jin. A Two-stage Approach for Learning a Sparse Model with Sharp Excess Risk Analysis. In *Proceedings of the 31st AAAI Conference on Artificial Intelligence* (**AAAI**), pp. 2224–2230, 2017.

92. Yi Xu, Haiqin Yang, **Lijun Zhang**, and Tianbao Yang. Efficient Non-oblivious Randomized Reduction for Risk Minimization with Improved Excess Risk Guarantee. In *Proceedings of the 31st AAAI Conference on Artificial Intelligence* (**AAAI**), pp. 2796–2802, 2017.

93. **Lijun Zhang**, Tianbao Yang, Rong Jin, and Zhi-Hua Zhou. Sparse Learning for Large-scale and High-dimensional Data: A Randomized Convex-concave Optimization Approach. In *Proceedings of the 27th International Conference on Algorithmic Learning Theory* (**ALT**), pp. 83–97, 2016.

94. Jianhui Chen, Tianbao Yang, Qihang Lin, **Lijun Zhang**, and Yi Chang. Optimal Stochastic Strongly Convex Optimization with a Logarithmic Number of Projections. In *Proceedings of the 32nd Conference on Uncertainty in Artificial Intelligence* (**UAI**), pp. 122–131, 2016.

95. **Lijun Zhang**, Tianbao Yang, Rong Jin, Yichi Xiao, and Zhi-Hua Zhou. Online Stochastic Linear Optimization under One-bit Feedback. In *Proceedings of the 33rd International Conference on Machine Learning* (**ICML**), pp. 392–401, 2016.

96. Tianbao Yang, **Lijun Zhang**, Rong Jin, and Jinfeng Yi. Tracking Slowly Moving Clairvoyant: Optimal Dynamic Regret of Online Learning with True and Noisy Gradient. In *Proceedings of the 33rd International Conference on Machine Learning* (**ICML**), pp. 449–457, 2016.

97. **Lijun Zhang**, Tianbao Yang, Jinfeng Yi, Rong Jin, and Zhi-Hua Zhou. Stochastic Optimization for Kernel PCA. In *Proceedings of the 30th AAAI Conference on Artificial Intelligence* (**AAAI**), pp. 2316–2322, 2016.

98. Weizhong Zhang, **Lijun Zhang**, Rong Jin, Deng Cai, and Xiaofei He. Accelerated Sparse Linear Regression via Random Projection. In *Proceedings of the 30th AAAI Conference on Artificial Intelligence* (**AAAI**), pp. 2337–2343, 2016.

99. Zhe Li, Tianbao Yang, **Lijun Zhang**, and Rong Jin. Fast and Accurate Refined Nyström Based Kernel SVM. In *Proceedings of the 30th AAAI Conference on Artificial Intelligence* (**AAAI**), pp. 1830–1836, 2016.

100. Jinfeng Yi, **Lijun Zhang**, Tianbao Yang, Wei Liu, and Jun Wang. An Efficient Semi-Supervised Clustering Algorithm with Sequential Constraints. In *Proceedings of the 21th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining* (**KDD**), pp. 1405–1414, 2015.

101. Mehrdad Mahdavi, **Lijun Zhang**, and Rong Jin. Lower and Upper Bounds on the Generalization of Stochastic Exponentially Concave Optimization. In *Proceedings of the 28th Conference on Learning Theory* (**COLT**), pp. 1305–1320, 2015.

102. Tianbao Yang, **Lijun Zhang**, Rong Jin, and Shenghuo Zhu. An Explicit Sampling Dependent Spectral Error Bound for Column Subset Selection. In *Proceedings of the 32nd International Conference on Machine Learning* (**ICML**), pp. 135–143, 2015.

103. Tianbao Yang, **Lijun Zhang**, Rong Jin, and Shenghuo Zhu. Theory of Dual-Sparse Regularized Randomized Reduction. In *Proceedings of the 32nd International Conference on Machine Learning* (**ICML**), pp. 305–314, 2015.

104. **Lijun Zhang**, Tianbao Yang, Rong Jin, and Zhi-Hua Zhou. A Simple Homotopy Algorithm for Compressive Sensing. In *Proceedings of the 18th International Conference on Artificial Intelligence and Statistics* (**AISTATS**), pp. 1116–1124, 2015.

105. **Lijun Zhang**, Tianbao Yang, Rong Jin, and Zhi-Hua Zhou. Online Bandit Learning for a Special Class of Non-convex Losses. In *Proceedings of the 29th AAAI Conference on Artificial Intelligence* (**AAAI**), pp. 3158–3164, 2015.

106. **Lijun Zhang**, Jinfeng Yi, and Rong Jin. Efficient Algorithms for Robust One-bit Compressive Sensing. In *Proceedings of the 31st International Conference on Machine Learning* (**ICML**), pp. 820–828, 2014.

107. Jinfeng Yi, **Lijun Zhang**, Jun Wang, Rong Jin, and Anil K. Jain. A Single-Pass Algorithm for Efficiently Recovering Sparse Cluster Centers of High-dimensional Data. In *Proceedings of the 31st International Conference on Machine Learning* (**ICML**), pp. 658–666, 2014.

108. Weizhong Zhang, **Lijun Zhang**, Yao Hu, Rong Jin, Deng Cai, and Xiaofei He. Sparse Learning for Stochastic Composite Optimization. In *Proceedings of the 28th AAAI Conference on Artificial Intelligence* (**AAAI**), pp. 893–899, 2014.

109. **Lijun Zhang**, Mehrdad Mahdavi, and Rong Jin. Linear Convergence With Condition Number Independent Access of Full Gradients. In *Advances in Neural Information Processing Systems 26* (**NIPS**), pp. 980–988, 2013.

110. Mehrdad Mahdavi, **Lijun Zhang**, and Rong Jin. Mixed Optimization for Smooth Functions. In *Advances in Neural Information Processing Systems 26* (**NIPS**), pp. 674–682, 2013.

111. **Lijun Zhang**, Mehrdad Mahdavi, Rong Jin, Tianbao Yang, and Shenghuo Zhu. Recovering the Optimal Solution by Dual Random Projection. In *Proceedings of the 26th Annual Conference on Learning Theory* (**COLT**), pp. 135–157, 2013.

112. **Lijun Zhang**, Jinfeng Yi, Rong Jin, Ming Lin, and Xiaofei He. Online Kernel Learning with a Near Optimal Sparsity Bound. In *Proceedings of the 30th International Conference on Machine Learning* (**ICML**), pp. 621–629, 2013.

113. **Lijun Zhang**, Tianbao Yang, Rong Jin, and Xiaofei He. $O(\log T)$ Projections for Stochastic Optimization of Smooth and Strongly Convex Functions. In *Proceedings of the 30th International Conference on Machine Learning* (**ICML**), pp. 1121–1129, 2013.

114. Jinfeng Yi, **Lijun Zhang**, Rong Jin, Qi Qian, and Anil K. Jain. Semi-Supervised Clustering by Input Pattern Assisted Pairwise Similarity Matrix Completion. In *Proceedings of the 30th International Conference on Machine Learning* (**ICML**), pp. 1400–1408, 2013.

115. Tianbao Yang, Mehrdad Mahdavi, Rong Jin, **Lijun Zhang**, and Yang Zhou. Multiple Kernel Learning from Noisy Labels by Stochastic Programming . In *Proceedings of the 29th International Conference on Machine Learning* (**ICML**), pp. 233–240, 2012.

116. **Lijun Zhang**, Rong Jin, Chun Chen, Jiajun Bu, and Xiaofei He. Efficient Online Learning for Large-Scale Sparse Kernel Logistic Regression. In *Proceedings of the 26th AAAI Conference on Artificial Intelligence* (**AAAI**), pp. 1219–1225, 2012.

117. Zhanying He, Chun Chen, Jiajun Bu, Can Wang, **Lijun Zhang**, Deng Cai, and Xiaofei He. Document Summarization Based on Data Reconstruction. In *Proceedings of the 26th AAAI Conference on Artificial Intelligence* (**AAAI**), pp. 620–626, 2012. (Outstanding Paper Award)

118. **Lijun Zhang**, Chun Chen, Jiajun Bu, Zhengguang Chen, Shulong Tan, and Xiaofei He. Discriminative Codeword Selection for Image Representation. In *Proceedings of the 18th ACM International Conference on Multimedia* (**ACM Multimedia**), pp. 173–182, 2010.

119. Jiajun Bu, Shulong Tan, Chun Chen, Can Wang, Hao Wu, **Lijun Zhang**, and Xiaofei He. Music Recommendation by Unified Hypergraph: Combining Social Media Information and Music Content. In *Proceedings of the 18th ACM International Conference on Multimedia* (**ACM Multimedia**), pp. 391–400, 2010.

120. Chun Chen, Zhengguang Chen, Jiajun Bu, Can Wang, **Lijun Zhang**, and Cheng Zhang. G-Optimal Design with Laplacian Regularization. In *Proceedings of the 24th AAAI Conference on Artificial Intelligence* (**AAAI**), pp. 413–418, 2010.

121. Hao Wu, Jiajun Bu, Chun Chen, Can Wang, Guang Qiu, **Lijun Zhang**, and Jianfeng Shen. Modeling Dynamic Multi-Topic Discussions in Online Forums. In *Proceedings of the 24th AAAI Conference on Artificial Intelligence* (**AAAI**), pp. 1455–1460, 2010.

122. **Lijun Zhang**, Chun Chen, Wei Chen, Jiajun Bu, Deng Cai, and Xiaofei He. Convex Experimental Design Using Manifold Structure for Image Retrieval. In *Proceedings of the 17th ACM International Conference on Multimedia* (**ACM Multimedia**), pp. 45–53, 2009.

Journal Publications

1. Sijia Chen, Yu-Jie Zhang, Wei-Wei Tu, Peng Zhao, and **Lijun Zhang**. Optimistic Online Mirror Descent for Bridging Stochastic and Adversarial Online Convex Optimization. *Journal of Machine Learning Research* (**JMLR**), 25(178): 1–62, 2024.

2. Peng Zhao, Yu-Jie Zhang, **Lijun Zhang**, and Zhi-Hua Zhou. Adaptivity and Non-stationarity: Problem-dependent Dynamic Regret for Online Convex Optimization. *Journal of Machine Learning Research* (**JMLR**), 25(98): 1–52, 2024.

3. Bo-Jian Hou, **Lijun Zhang**, and Zhi-Hua Zhou. Prediction With Unpredictable Feature Evolution. *IEEE Transactions on Neural Networks and Learning Systems* (**TNNLS**), 33(10): 5706–5715, 2022.

4. Yuanyu Wan, and **Lijun Zhang**. Efficient Adaptive Online Learning via Frequent Directions. *IEEE Transactions on Pattern Analysis and Machine Intelligence* (**TPAMI**), 44(10): 6910–6923, 2022.

5. Yuanyu Wan, Wei-Wei Tu, and **Lijun Zhang**. Strongly Adaptive Online Learning over Partial Intervals. *Science China Information Sciences* (**SCIS**), 65(10): 202101, 2022.

6. Yuanyu Wan, Guanghui Wang, Wei-Wei Tu, and **Lijun Zhang**. Projection-free Distributed Online Learning with Sublinear Communication Complexity. *Journal of Machine Learning Research* (**JMLR**), 23(172): 1–53, 2022.

7. Yuanyu Wan, Wei-Wei Tu, and **Lijun Zhang**. Online Strongly Convex Optimization with Unknown Delays. *Machine Learning*, 111(3): 871–893, 2022.

8. Haipeng Dai, Ke Sun, Alex X. Liu, **Lijun Zhang**, Jiaqi Zheng, and Guihai Chen. Charging Task Scheduling for Directional Wireless Charger Networks. *IEEE Transactions on Mobile Computing* (**TMC**), 20(11): 3163–3180, 2021.

9. Peng Zhao, Guanghui Wang, **Lijun Zhang**, and Zhi-Hua Zhou. Bandit Convex Optimization in Non-stationary Environments. *Journal of Machine Learning Research* (**JMLR**), 22(125): 1–45, 2021.

10. Bo-Jian Hou, **Lijun Zhang**, and Zhi-Hua Zhou. Learning With Feature Evolvable Streams. *IEEE Transactions on Knowledge and Data Engineering* (**TKDE**), 33(6): 2602–2615, 2021.

11. Tianbao Yang, **Lijun Zhang**, Qihang Lin, Shenghuo Zhu, and Rong Jin. High-dimensional Model Recovery from Random Sketched Data by Exploring Intrinsic Sparsity. *Machine Learning*, 109(5): 899–938, 2020.

12. Yuanyu Wan, and **Lijun Zhang**. Accelerating Adaptive Online Learning by Matrix Approximation. *International Journal of Data Science and Analytics* (**JDSA**), 9(4): 389–400, 2020.

13. Fanhua Shang, Kaiwen Zhou, Hongying Liu, James Cheng, Ivor W. Tsang, **Lijun Zhang**, Dacheng Tao, and Licheng Jiao. Sparse Learning with Stochastic Composite Optimization. *IEEE Transactions on Knowledge and Data Engineering* (**TKDE**), 32(1): 188–202, 2020.

14. **Lijun Zhang**, Tianbao Yang, Rong Jin, and Zhi-Hua Zhou. Relative Error Bound Analysis for Nuclear Norm Regularized Matrix Completion. *Journal of Machine Learning Research* (**JMLR**), 20(97): 1–22, 2019.

15. Tianbao Yang, **Lijun Zhang**, Rong Jin, Shenghuo Zhu, and Zhi-Hua Zhou. A Simple Homotopy Proximal Mapping Algorithm for Compressive Sensing. *Machine Learning*, 108(6): 1019–1056, 2019.

16. Weizhong Zhang, **Lijun Zhang**, Zhongming Jin, Rong Jin, Deng Cai, Xuelong Li, Ronghua Liang, and Xiaofei He. Sparse Learning with Stochastic Composite Optimization. *IEEE Transactions on Pattern Analysis and Machine Intelligence* (**TPAMI**), 39(6): 1223–1236, 2017.

17. Sen Yang, and **Lijun Zhang**. Non-redundant Multiple Clustering by Nonnegative Matrix Factorization. *Machine Learning*, 106(5): 695–712, 2017.

18. Xiaofei He, Chiyuan Zhang, **Lijun Zhang**, and Xuelong Li. A-Optimal Projection for Image Representation. *IEEE Transactions on Pattern Analysis and Machine Intelligence* (**TPAMI**), 38(5): 1009–1015, 2016.

19. Zhou Zhao, Xiaofei He, Deng Cai, **Lijun Zhang**, Wilfred Ng, and Yueting Zhuang. Graph Regularized Feature Selection with Data Reconstruction. *IEEE Transactions on Knowledge and Data Engineering* (**TKDE**), 28(3): 689–700, 2016.

20. Ming Lin, **Lijun Zhang**, Rong Jin, Shifeng Weng, and Changshui Zhang. Online Kernel Learning with Nearly Constant Support Vectors. *Neurocomputing*, 179: 26–36, 2016.

21. Ziyu Guan, **Lijun Zhang**, Jinye Peng, and Jianping Fan. Multi-View Concept Learning for Data Representation. *IEEE Transactions on Knowledge and Data Engineering*, (**TKDE**), 27(11): 3016–3028, 2015.

22. Zhou Zhao, **Lijun Zhang**, Xiaofei He, and Wilfred Ng. Expert Finding for Question Answering via Graph Regularized Matrix Completion. *IEEE Transactions on Knowledge and Data Engineering* (**TKDE**), 27(4): 993–1004, 2015.

23. Qi Qian, Rong Jin, Jinfeng Yi, **Lijun Zhang**, and Shenghuo Zhu. Efficient Distance Metric Learning by Adaptive Sampling and Mini-Batch Stochastic Gradient Descent (SGD). *Machine Learning*, 99(3): 353–372, 2015.

24. Ping Li, Jiajun Bu, **Lijun Zhang**, and Chun Chen. Graph-Based Local Concept Coordinate Factorization. *Knowledge and Information Systems* (**TKDE**), 43(1): 103–126, 2015.

25. Zhanying He, Chun Chen, Jiajun Bu, Can Wang, **Lijun Zhang**, Deng Cai, and Xiaofei He. Unsupervised Document Summarization from Data Reconstruction Perspective. *Neurocomputing*, 157: 356–366, 2015.

26. **Lijun Zhang**, Mehrdad Mahdavi, Rong Jin, Tianbao Yang, and Shenghuo Zhu. Random Projections for Classification: A Recovery Approach. *IEEE Transactions on Information Theory* (**TIT**), 60(11): 7300–7316, 2014.

27. **Lijun Zhang**. Locally Regressive Projections. *International Journal of Software and Informatics* (**IJSI**), 7(3): 435–451, 2013.

28. **Lijun Zhang**, Chun Chen, Jiajun Bu, Zhengguang Chen, Deng Cai, and Jiawei Han. Locally Discriminative Coclustering. *IEEE Transactions on Knowledge and Data Engineering* (**TKDE**), 24(6): 1025–1035, 2012.

29. **Lijun Zhang**, Chun Chen, Jiajun Bu, and Xiaofei He. A Unified Feature and Instance Selection Framework Using Optimum Experimental Design. *IEEE Transactions on Image Processing* (**TIP**), 21(5): 2379–2388, 2012.

30. Hao Wu, Jiajun Bu, Chun Chen, Jianke Zhu, **Lijun Zhang**, Haifeng Liu, Can Wang, and Deng Cai. Locally Discriminative Topic Modeling. *Pattern Recognition*, 45(1): 617–625, 2012.

31. **Lijun Zhang**, Chun Chen, Jiajun Bu, Deng Cai, Xiaofei He, and Thomas S. Huang. Active Learning Based on Locally Linear Reconstruction. *IEEE Transactions on Pattern Analysis and Machine Intelligence* (**TPAMI**), 33(10): 2026–2038, 2011.

32. Miao Zheng, Jiajun Bu, Chun Chen, Can Wang, **Lijun Zhang**, Guang Qiu, and Deng Cai. Graph Regularized Sparse Coding for Image Representation. *IEEE Transactions on Image Processing* (**TIP**), 20(5): 1327–1336. 2011.

33. **Lijun Zhang**, Zhengguang Chen, Miao Zheng, and Xiaofei He. Robust Non-negative Matrix Factorization. *Frontiers of Electrical and Electronic Engineering in China*, 6: 192–200, 2011.

34. Chun Chen, **Lijun Zhang**, Jiajun Bu, Can Wang, and Wei Chen. Constrained Laplacian Eigenmap for Dimensionality Reduction. *Neurocomputing*, 73(4-6): 951–958, 2010.

Invited Talks

- Learning from Multiple Distributions: GDRO and MERO, LAMDA & RIKEN-AIP Joint Workshop on Machine Learning.
- Group Distributionally Robust Optimization, The 4th Conference on Big Data and Artificial Intelligence Organized by CSIAM (**CSIAM-BDAI 2023**).
- Smoothed Online Learning, The 3rd Conference on Big Data and Artificial Intelligence Organized by CSIAM (**CSIAM-BDAI 2021**).
- Online Learning in Changing Environments, Early Career Spotlight Talks of the 29th International Joint Conference on Artificial Intelligence (**IJCAI 2020**).

- Adaptive Regret for Online Learning, Microsoft Research Asia Academic Day 2019.
- Learning under Heavy-tailed Distributions, The 2nd International Symposium on Image Computing and Digital Medicine (**ISICDM 2018**).
- Efficient Online Learning for Dynamic Environments, The 1st Conference on Big Data and Artificial Intelligence Organized by CSIAM (**CSIAM-BDAI 2018**).
- Efficient Online Learning for Dynamic Environments, 2018 International Workshop on Signal Processing, Optimization and Control (**SPOC 2018**).
- Online Learning and Applications, The 1st International Symposium on Image Computing and Digital Medicine (**ISICDM 2017**).
- Fast Rates for Empirical Risk Minimization: Beyond the $O(1/n)$ Risk Bound, The 16th China Conference on Machine Learning (**CCML 2017**).
- Online Learning in Dynamic Environment, The 2nd Youth Symposium on Scientific and Engineering Computing (**YSSEC 2016**).
- Online Stochastic Linear Optimization under One-bit Feedback, The 6th Vision and Learning Seminar (**VALSE 2016**).
- Randomized Algorithms for Large-scale Convex Optimization, 2016 Nanjing Workshop on Numerical Optimization with Applications.
- Stochastic Optimization for Large-scale Machine Learning, The 13rd Chinese Workshop on Machine Learning and Applications (**MLA 2015**).
- Randomized Algorithms for Large-scale Convex Optimization, The 2nd Chinese Workshop on Evolutionary Computation and Learning (**ECOLE 2015**).