



徐丽君

副教授

硕士生导师

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教育背景

大连理工大学理学博士（2017）
美国莱斯大学联合培养博士（2012.01-2013.7）
大连理工大学理学学士（2008）

研究领域

数值优化、稀疏优化、矩阵优化等理论算法，机器学习中的优化算法与应用

代表性成果

期刊论文：

- (1) Wenxiu Liu; **Lijun Xu***; Yijia Zhou; Bo Yu, Fast alternating direction algorithms for sparse portfolio model via sorted ℓ_1 -norm, *Journal of Intelligent & Fuzzy Systems*, 45(6): 11853-11872, 2023.12.02 (SCI Q4)
- (2) **Lijun Xu**; Yijia Zhou, New Robust Reward-Risk Ratio Models with CVaR and Standard Deviation, *Journal of Mathematics*, 2022, Article ID 8304411, 12 pages. (SCI Q1)
- (3) **徐丽君***; 胡瑞戈; 李婷, 压缩感知中 L1 问题的自适应罚参数交替方向算法, *大连理工大学学报*, 2022, 62(1):95-101 (中文核心)
- (4) **Lijun Xu**; Yijia Zhou*; Bo Yu, Robust Optimization Model with Shared Uncertain Parameters in Multi-Stage Logistics Production and Inventory Process, *Mathematics*, 2020, 8(2), 211. (SCI Q1)
- (5) Guoqiang Wang; Xinyuan Wei; Bo Yu*; **Lijun Xu**, An Efficient Proximal Block Coordinate Homotopy Method for Large-Scale Sparse Least Squares Problems, *SIAM Journal on Scientific Computing*, 2020, 42(1): A395-A423. (SCI Q2)
- (6) 周伊佳; 贾宁; **徐丽君***, 基于共享不确定性的多阶段生产与库存的鲁棒优化方法, *大连海事大学学报*, 2020, 46(4). (中文核心)
- (7) **Lijun Xu***; Bo Yu; Yin Zhang, An Alternating Direction and Projection Algorithm for Structure-enforced Matrix Factorization, *Computational Optimization and Applications*, 2017, 68(2):

333-362. (SCI Q2)

- (8) Yijia Zhou*; Li Yang; **Lijun Xu**; Bo Yu, Inseparable robust reward-risk optimization models with distribution uncertainty, *Japan Journal of Industrial and Applied Mathematics*, 2016, 33(3): 767~780. (SCI Q3)

会议论文:

- (1) **Lijun Xu**; Chenghua Ji; Yijia Zhou, A stochastic proximal alternating minimization algorithm for nonnegative matrix decomposition, *Proc. SPIE 12784, Second International Conference on Applied Statistics, Computational Mathematics, and Software Engineering (ASCMSE 2023)*, 127843J (2023.08.23) (EI)
- (2) **Lijun Xu**; Ying Wang; Yijia Zhou, Dictionary Learning in Convolutional Sparse Representation, *Second International Conference on Statistics, Applied Mathematics, and Computing Science*, 2023.03.28. (EI)
- (3) **Lijun Xu**; Ting Li; Yijia Zhou, An efficient method for solving non-negative Sylvester matrix equations, *Second International Conference on Statistics, Applied Mathematics, and Computing Science*, 2023.03.28. (EI)
- (4) Houhua Shao; **Lijun Xu***; Chunlei Liu; Yong Yin, A Heuristic Method for Solving Ship Floating Problems Based on Improved Particle Swarm Optimization, *Journal of Physics: Conference Series*, 2023, 2470, 012008. (EI)
- (5) Yijia Zhou; **Lijun Xu***, An efficient ADMM-type algorithm for deep semi-nonnegative matrix factorization, *The Third International Conference on Physics, Mathematics and Statistics*, 2020.6.22-2020.6.23 (EI)
- (6) Yijia Zhou; **Lijun Xu***, Convergence of an alternating direction and projection method for sparse dictionary learning, *The Third International Conference on Physics, Mathematics and Statistics*, 2020.6.22-2020.6.23 (EI)
- (7) Yijia Zhou; **Lijun Xu***, A Deep Structure-Enforced Nonnegative Matrix Factorization for Data Representation, *Lecture Notes in Computer Science*, 11258(III): 340-350, 2018.11.23-2018.11.26 (EI)
- (8) **Lijun Xu***; Yijia Zhou; Bo Yu, Classification and Clustering via Structure-enforced Matrix Factorization, *Lecture Notes in Computer Science*, 10559: 403--411, 2017.9.22-2017.9.23 (EI)

科研项目:

- (1) 中国博士后科学基金, 面上项目, 2020M670717, 基于深度矩阵分解模型的深度学习算法研究及其应用, 2020/01-2023/12, 8万元, 在研, **主持**.
- (2) 中央高校基本科研业务费青年教师科技创新项目, 3132020171,

代表性项目

大规模压缩感知问题的高效率求解算法的研究及应用,
2020/01-2020/12, 3.4 万, 已结题, **主持**.

- (3) 中央高校基本科研业务费青年教师科技创新项目, 3132018218, 深度非负矩阵分解的算法研究及在深层特征学习中应用, 2018/01-2018/12, 已结题, **主持**.
- (4) 国家自然科学基金青年项目, 11101067, 带结构的模型修正问题的数值解法、软件及应用, 2011/12-2014/12, 已结题, 参与.
- (5) 国家自然科学基金专项基金, 11026164, 带结构的二次特征值反问题的数值解法、软件及应用, 2011/01-2011/12, 已结题, 参与.

教改项目:

- (1) 大连海事大学研究生教育教学改革项目, YJG2023208, “数值优化”研究生课程思政示范项目, 2023/09-2025/08, 2 万元, 在研, **主持**.
- (2) 大连海事大学教师发展项目, JF2023S24, 应用数学专业实践类课程思政案例的探索与实践, 2023/09-2024/08, 1 万元, 在研, **主持**.
- (3) 教育部产学合作协同育人项目, 202102512016, 人工智能背景下的数学专业金融科技实践体系资源建设, 2021/09-2022/10, 2 万元, 已结题, **主持**.
- (4) 大连海事大学研究生教育教学改革项目, YJG2021513, 交叉学科背景下“数值优化”课程的教学改革与研讨, 2021/09-2022/08, 1 万元, 已结题 (优秀), **主持**.

- (1) 大连海事大学优秀共产党员 (2021 年)
- (2) 大连海事大学理论课堂教学比赛三等奖 (2021 年)
- (3) 辽宁省高校教师教学创新大赛三等奖 (2022 年、2023 年)

荣誉奖励

