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教授

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#### 教育背景

大连理工大学工学博士（2009）

大连理工大学理学硕士（2006）

内蒙古大学理学学士（2003）

#### 研究领域

数据分析和建模

不确定性分析

粒计算

#### 代表性成果

论文类：

- [1] Hongyue Guo, Mengjun Wan, **Lidong Wang\***, Xiaodong Liu, X., Witold Pedrycz. Weighted Fuzzy Clustering for Time Series With Trend-Based Information Granulation. *IEEE Transactions on Cybernetics*, 2022, DOI: 10.1109/TCYB.2022.3190705.
- [2] **Lidong Wang**, Xueqin Liu, and Yanjun Wang\*. A two-stage granular consensus model for minimum adjustment and minimum cost under Pythagorean fuzzy linguistic information. *Applied Soft Computing* (2022): 109110.
- [3] Yunhui Pang, **Lidong Wang\***, Yifei Liu, Jiayi Guo. Fuzzy rule-based models via space partition and information granulation. *Neural Computing and Applications*, 2022, DOI: 10.1007/s00521-022-06974-3.

- [4] Mengjun Wan, Hongyue Guo\*, **Lidong Wang**. Time series granulation-based multivariate modelling and prediction. *International Journal of Computing Science and Mathematics*, 2022 15(3), 258-272.
- [5] Yanjun Wang\*, Xiaoxuan Hu, **Lidong Wang**. Effectiveness evaluation method of constellation satellite communication system with acceptable consistency and consensus under probability hesitant intuitionistic fuzzy preference relationship. *Soft Computing*, 2022, DOI: 10.1007/s00500-022-07220-7
- [6] Hongyue Guo, **Lidong Wang\***, Xiaodong Liu, Witold Pedrycz. Trend-based Granular Representation of Time Series and its Application in Clustering. *IEEE Transactions on Cybernetics*, 2021, DOI: 10.1109/TCYB.2021.3054593
- [7] Fang Zhao, Hongyue Guo, **Lidong Wang\***. Granular rule-based modeling using the principle of justifiable granularity and boundary erosion clustering. *Soft Computing*, 2021: 1-11
- [8] Xueqin Liu, Yanjun Wang, **Lidong Wang\***. Sustainable competitiveness evaluation of container liners based on granular computing and social network group decision making. *International Journal of Machine Learning and Cybernetics*, 2021: 1-14.
- [9] **Lidong Wang**, Fang Zhao, Hongyue Guo\*, Xiaodong Liu, Witold Pedrycz. Top-Down Granulation Modeling Based on the Principle of Justifiable Granularity, *IEEE Transactions on Fuzzy Systems*, 2020, DOI 10.1109/TFUZZ.2020.3046333
- [10] Hongyue Guo, Haibo Kuang, **Lidong Wang\***, Xiaodong Liu, Witold Pedrycz. Hierarchical Axiomatic Fuzzy Set Granulation for Financial Time Series Clustering, *IEEE Transactions on Fuzzy Systems*, 2020, DOI: DOI 10.1109/TFUZZ.2020.3048514
- [11] Yashuang Mu\*, Xiaodong Liu, **Lidong Wang**, et al. A parallel fuzzy rule-base based decision tree in the framework of map-reduce. *Pattern Recognition*, 2020, 103: 107326.
- [12] **Lidong Wang\***, Yanjun Wang, Witold Pedrycz. Hesitant 2-Tuple Linguistic Bonferroni Operators and Their Utilization in Group Decision Making, *Applied Soft Computing Journal*, 2019, 77: 653-664.
- [13] Hongyue Guo\*, **Lidong Wang**, Xiaodong Liu. Dynamic time alignment kernel-based fuzzy clustering of non-equal length vector time series. *International Journal of Machine Learning and Cybernetics*, 2019, 10(11): 3167-3179.
- [14] **Lidong Wang\***, Yanjun Wang, Arun Kumar Sangaiah, Bingquan

- Liao. Intuitionistic linguistic group decision-making methods based on generalized compensative weighted averaging aggregation operators, *Soft Computing*, 2018, 22: 7605-7617.
- [15] Yashuang Mu, Xiaodong Liu\*, **Lidong Wang**. A Pearson's correlation coefficient based decision tree and its parallel implementation. *Information Sciences*, 2018, 435: 40-58.
- [16] **Lidong Wang\***, Binqun Liao, Xiaodong Liu, et al. Possibility-based ELECTRE II method with uncertain linguistic fuzzy variables. *International Journal of Pattern Recognition and Artificial Intelligence*, 2017, 31(09): 1759016.
- [17] **Lidong Wang\***, Xiaodong Liu, and Jinhai Li. AFS-Based Formal Concept Analysis on Multi-valued Context. *International Joint Conference on Rough Sets*. Springer, Cham, 2017: 540-557.
- [18] Xiaojuan Tian\*, Xiaodong Liu, **Lidong Wang**. An improved PROMETHEE II method based on Axiomatic Fuzzy Sets. *Neural Computing and Applications*, 2014, 25(7): 1675-1683.
- [19] **Lidong Wang\***, Xiaodong Liu, Yashuang Mu. The Global k-Means Clustering Analysis Based on Multi-Granulations Nearness Neighborhood. *Mathematics in Computer Science*, 2013, 7: 113-124.
- [20] **Lidong Wang\***, Yan Ren, Xiaodong Liu. Development of near sets within the framework of axiomatic fuzzy sets. *Fundamenta Informaticae*, 2012, 118(3): 291-304.
- [21] **Lidong Wang\***, Xiaodong Liu, Wangren Qiu. Nearness approximation space based on axiomatic fuzzy sets. *International Journal of Approximate Reasoning*, 2012, 53(2): 200-211.
- [22] **Lidong Wang\***, Xiaodong Liu, Jiannong Cao. A new algebraic structure for formal concept analysis. *Information Sciences*, 2010, 180(24): 4865-4876.
- [23] **Lidong Wang\***, Xiaodong Liu. Concept analysis via rough set and AFS algebra. *Information Sciences*, 2008, 178(21): 4125-4137.
- [24] 高苏, 鲍君忠, 王昕, **王利东\***. 可解释性有序聚类方法及其应用分析. *计算机应用*, 2022, 42(02): 457-462.
- [25] 赵芳, 郭红月, **王利东\***. 基于区间二型 FCM 和合理粒度原则的信息粒生成方法及应用. *模糊系统与数学*, 2021, 35(01): 101-110.
- [26] 赵冬雪, 王昕, **王利东\***. 基于属性选择和采样策略的不平衡数据动态分类方法. *数据采集与处理*, 2021, 36(03): 509-518.
- [27] 高苏, 王利东, 王昕. 基于直觉正态云的决策方法及其在风险评估中的应用. *模糊系统与数学*, 2021, 35(01): 155-162.
- [28] 李敬, **王利东\***. 面向不完备信息系统的双论域决策粗糙集——基于双相对量化信息的角度. *计算机科学与探索*, 2018, 12(04): 653-661.

### 著作/教材类:

张运杰、陈国艳、王利东、高红、刘雪松.《数学建模》数字课程, 高等教育出版社, 2020.

### 代表性项目

- [1] 国家自然科学基金, 62173053, 面向可解释性的复杂数据层次粒化机理、建模及其应用研究, 在研, 主持。
- [2] 国家自然科学基金, 61203283, 基于公理模糊集和粒化认知机理的形式概念分析, 已结题, 主持。
- [3] 人工智能四川省重点实验室开放课题, 2012RYJ02, 基于不确定性描述逻辑的本体推理模型研究, 已结题, 主持。
- [4] 辽宁省自然科学基金, 2014025004, 面向复杂数据的概念格理论方法与应用研究, 已结题, 主持。
- [5] 国家自然科学基金, 61773352, 面向复杂数据的粒神经网络模型及其泛化能力的研究, 在研, 联合申请。
- [6] 辽宁省教学改革项目, 辽教函[2018]471号, 开展数据通识教育的实践教学研究与探索, 已结题, 主持。
- [7] 辽宁省教学改革项目, 辽教办[2021]254号, 问题驱动下的工程数学教学模式研究与实践, 在研, 参与。
- [8] 中国学位与研究生教育学会教育研究课题, 2020MSA43, 大数据背景下的研究生数据素养分析与提升实践, 在研, 主持。

### 荣誉奖励

- [1] 2018年辽宁省普通高等教育本科教学成果奖二等奖, 排名第3。
- [2] 2018年辽宁省普通高等教育教学成果奖(研究生类)三等奖, 排名第3。
- [3] 2020年大连海事大学本科教学成果奖二等奖, 排名第1。
- [4] 2022年大连海事大学本科教学成果奖二等奖, 排名第3。
- [5] 2020年大连海事大学研究生教学成果奖一等奖, 排名第4。
- [6] 首届国家级一流本科课程《数学建模》团队成员。

### 社会兼职

中国人工智能学会粒计算与知识发现专委会委员。  
Zentralblatt MATH 评论员。