



吕庚育

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■ 教育背景

2022.07-至今	北京工业大学信息学部计算机学院	校聘教授、博导
2018.09-2022.06	北京交通大学计算机与信息技术学院	博士阶段
2016.09-2018.07	北京交通大学计算机与信息技术学院	硕士阶段
2012.09-2016.07	北京联合大学软件工程（实验班）	工学学士

■ 研究方向

机器学习与数据挖掘，主要研究弱监督标注条件下的多标记学习、多视图学习等。

■ 发表论文(累计 26 篇：SCI 期刊 17 篇，会议 9 篇；CCF A 类 6 篇，B 类 8 篇；JCR Q1 15 篇)

- [1] **G. Lyu, S. Feng, T. Wang, C. Lang, Y. Li.** GM-PLL: Graph Matching based Partial Label Learning. *IEEE Transactions on Knowledge and Data Engineering*. 33(2): 521-535. 2021 (CCF A, JCR:Q1,中科院二区, IF:6.977)
- [2] **G. Lyu, S. Feng, Y. Li.** Partial Multi-Label Learning via Probabilistic Graph Matching Mechanism. *ACM SIGKDD Conference on Knowledge Discovery and Data Mining*. 2020: 105-113 (CCF A, Oral)
- [3] **G. Lyu, X. Deng, Y. Wu, S. Feng.** Beyond Shared Subspace: A View-Specific Fusion for Multi-View Multi-Label Learning. *AAAI Conference on Artificial Intelligence*. 2022 (CCF A)
- [4] **G. Lyu, Y. Wu, S. Feng, T. Wang.** Deep Graph Matching for Partial Label Learning. *International Joint Conference on Artificial Intelligence*. 2022 (CCF A)
- [5] **G. Lyu, S. Feng, T. Wang, C. Lang.** A Self-Paced Regularization Framework for Partial Label Learning. *IEEE Transactions on Cybernetics*. 2022 (CCF B, JCR:Q1,中科院一区, IF:11.448)
- [6] **G. Lyu, S. Feng, Y. Jin, T. Wang, C. Lang, Y. Li.** Prior Knowledge Regularized Self-Representation Model for Partial Multi-Label Learning. *IEEE Transactions on Cybernetics*. 2021 (CCF B, JCR:Q1,中科院一区, IF:11.448)
- [7] **G. Lyu, S. Feng, Y. Li, Y. Jin, C. Lang.** HERA: Partial Label Learning by Combining Heterogeneous Loss with Sparse and Low-Rank Regularization. *ACM Transactions on Intelligent Systems and Technology*. 11(3), 34:1-34, 2020 (JCR:Q1,中科院三区, IF:4.654)
- [8] **G. Lyu, S. Feng, W. Liu, Y. Li.** Redundant Label Learning via Subspace Representation and Global Disambiguation. *ACM Transactions on Intelligent Systems and Technology*. 2022 (JCR:Q1,中科院三区, IF:4.654)
- [9] **G. Lyu, S. Feng, Y. Li.** Partial Label Learning via Self-Paced Curriculum Strategy. *The European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases*. 2020: 489-505 (CCF B, Oral)
- [10] **G. Lyu, S. Feng, Y. Li, H. Liu, T. Wang.** Noisy Label Tolerance: A New Perspective of Partial

Multi-Label Learning. *Information Sciences*. 543: 541-564, 2021 (CCF B, JCR:Q1, 中科院一区, IF:6.795)

[11] G. Lyu, S. Feng, W. Huang, G. Dai, B. Chen. Partial Label Learning via Low-Rank Representation and Label Propagation. *Soft Computing*. 24(7): 5165-5176, 2020 (CCF C, JCR:Q2, 中科院三区, IF:3.643)

[12] Z. Li*, G. Lyu*(equal contribution), S. Feng. Partial Multi-Label Learning via Multi-Subspace Representation. *International Joint Conference on Artificial Intelligence*. 2020: 2612-2618 (CCF A, Oral)

[13] Y. Sun*, G. Lyu*(equal contribution), S. Feng. Partial Label Learning via Subspace Representation and Global Disambiguation. *The European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases*. 2020: 439-454 (CCF B, Oral)

[14] L. Sun*, G. Lyu*(equal contribution), S. Feng, X. Huang. Beyond Missing: Weakly-Supervised Multi-Label Learning with Incomplete and Noisy Labels. *Applied Intelligence*. 51(3): 1552-1564, 2021 (CCF C, JCR:Q1, 中科院三区, IF:5.086)

[15] X. Deng, S. Feng, G. Lyu, H. Liu, Y. Jin. Beyond Word Embeddings: Heterogeneous Prior Knowledge Driven Multi-Label Image Classification. *IEEE Transactions on Multimedia*. 2022 (CCF B, JCR:Q1, 中科院一区, IF:6.513)

[16] Y. Wu, H. Liu, S. Feng, Y. Jin, G. Lyu, Z. Wu. GM-MLIC: Graph Matching based Multi-Label Image Classification. *International Joint Conference on Artificial Intelligence*. 2021: 1179-1185 (CCF A, Oral)

[17] L. Sun, S. Feng, J. Liu, G. Lyu, C. Lang. Global-Local Label Correlation for Partial Multi-Label Learning. *IEEE Transactions on Multimedia*. 2020. (CCF B, JCR:Q1, 中科院一区, IF:6.513)

[18] X. Lu, S. Feng, G. Lyu, Y. Jin, C. Lang. "Distance-Preserving Embedding Adaptive Bipartite Graph Multi-View Learning with Application to Multi-Label Classification", *ACM Transactions on Knowledge Discovery from Data*. 2022. (CCF B, JCR:Q2, 中科院三区, IF:2.713)

[19] L. Sun, S. Feng, G. Lyu, H. Zhang, G. Dai. Partial Multi-Label Learning with Noisy Side Information. *Knowledge and Information Systems*. 63(2): 541-564. 2020. (CCF B, JCR:Q2, 中科院三区, IF:2.822)

[20] L. Sun, Ping Ye, G. Lyu, S. Feng, G. Dai, H. Zhang. Weakly-Supervised Multi-Label Learning with Noisy Features and Incomplete Labels. *Neurocomputing*. 413: 61-71. 2020 (CCF C, JCR:Q1, 中科院二区, IF:5.719)

[21] M. Wang, C. Lang, L. Liang, G. Lyu, S. Feng, T. Wang. Class-balanced Text to Image Synthesis with Attention Generative Adversarial Network. *IEEE Multimedia*. 2020. (JCR:Q1, 中科院二区, IF:5.633)

[22] J. Zhao, G. Lyu, S. Feng. Linear Neighborhood Reconstruction Constrained Latent Subspace Discovery for Incomplete Multi-View Clustering. *Applied Intelligence*. 2021. (CCF C, JCR:Q1, 中科院三区, IF:5.086)

[23] L. Sun, S. Feng, G. Lyu, C. Lang. Robust Semi-Supervised Multi-Label Learning by Triple Low-Rank Regularization. *Pacific-Asia Conference on Knowledge Discovery and Data Mining*. 269-280. 2019. (CCF C, Oral)

[24] M. Wang, C. Lang, L. Liang, G. Lyu, S. Feng, T. Wang. Attentive generative adversarial network to bridge multi-domain gap for image synthesis. *IEEE International Conference on Multimedia and Expo*. 1-6. 2021. (CCF B, Oral)

[25] S. Wang, M. Xia, Z. Wang, G. Lyu, S. Feng. Partial Label Learning with Noisy Side Information. *Applied Intelligence*. 2021. (CCF C, JCR:Q1, 中科院三区, IF:5.086)

[26] W. Liu, J. Yuan, G. Lyu, S. Feng. Label Driven Latent Subspace Learning for Multi-View Multi-Label

Classification. *Applied Intelligence*. 2022. (CCF C, JCR:Q1,中科院三区, IF:5.086)

➤ 在投论文

- [1] **G. Lyu, S. Wang, S. Feng**. Prior Knowledge Constrained Adaptive Graph Framework for Partial Label Learning. *ACM Transactions on Intelligent Systems and Technology*. 2022
- [2] **H. Wang, G. Lyu, W. Liu et al.** Deep Partial Multi-Label Learning with Graph Disambiguation. *IEEE Transactions on Neural Networks and Learning Systems*. 2021
- [3] **Y. Wu, S. Feng, G. Lyu, Z. Wu, Y. Jin, Y. Wang**. Semantic-Aware Graph Matching Mechanism for Multi-Label Image Recognition. *IEEE Transactions on Pattern Analysis and Machine Intelligence*. 2022
- [4] **Y. Wu, S. Feng, G. Zhao, T. Wang, G. Lyu, Z. Wu**. Attention-Driven Matching Selection Mechanism for Multi-Label Image Classification. *IEEE Transactions on Image Processing*. 2022
- [5] **W. Liu, G. Lyu, S. Feng**. Graph-based Multi-View Multi-Label Classification. *Applied Intelligence*. 2022

■ 研究项目

- [1] “偏标记学习算法研究”, 中央高校基本业务费 主持
- [2] “弱监督多标记学习算法研究”, 中央高校基本业务费 主持
- [3] “弱监督学习框架下大规模图像语义理解关键技术研究”, 国家自然科学基金面上 参与
- [4] “面向复杂场景的无监督迁移学习行人再识别方法研究”, 国家自然科学基金面上 参与
- [5] “弱监督学习框架下图像视觉显著性分析与语义分割关键技术研究”, 国家自然科学基金面上 参与
- [6] “弱监督多标记学习算法研究及其在图像语义理解中的应用”, 北京市自然科学基金面上 参与
- [7] “弱监督学习框架下图像显著性检测与分割关键技术研究”, 北京市自然科学基金面上 参与
- [8] “智能安防中的视频数据保护及跨时空跨媒体信息关联技术研究”, 教育部-中移动 参与
- [9] “基于多源异构数据融合的环境感知与理解算法开发”, 浙江省重点研发计划子课题 参与
- [10] “弱监督多标记学习算法及其在图像语义理解中的应用”, 基本科研业务费 参与
- [11] “跨视域特定场景火灾烟雾识别与关联性预测”, 基本科研业务费 参与

■ 发明专利

- [1] 基于噪声容忍的偏多标记学习算法 202010412161.7

■ 学术服务

- [1] 会议程序委员会成员 / 审稿人: ICLR 2022, 2023; ICML 2021, 2022; NeurIPS 2021, 2022; CVPR 2021, 2022; ICCV 2021; ECCV 2022; AAAI 2021, 2022, 2023; IJCAI 2022; ECML-PKDD 2020;
- [2] 期刊审稿人: TPAMI, TNNLS, TMM, TII, Neurocomputing;

■ 学术讲座

[1] 会议报告:

- Partial Multi-Label Learning via Probabilistic Graph Matching Mechanism – ACM SIGKDD, 2020
- Partial Label Learning via Self-Paced Curriculum Strategy – ECML-PKDD, 2020
- Beyond Shared Subspace: A View-Specific Fusion for Multi-View Multi-Label Learning – AAAI, 2022

[2] 受邀报告:

- Partial Multi-Label Learning via Multi-Subspace Representation – 2021 IJCAI 青年精英学术大会
- 基于概率图匹配机制的偏多标记学习算法 – 中国机器学习及其应用研讨会, 2020

■ 课程助教

- | | | |
|--------------|--------|------------------|
| [1] C 语言程序设计 | 北京交通大学 | 2017, 2018, 2019 |
| [2] 机器视觉基础 | 北京交通大学 | 2019 |

■ 党建工作

[1] 北京交通大学计算机与信息技术学院 2018 级博士班党支部书记

- 全国高校“百个研究生样板党支部”(国家级) 2021
- 北京市先进班集体(省部级) 2021
- 北京市优秀学生基层组织(省部级) 2021
- 北京交通大学研究生先进班集体(校级) 2019, 2020, 2021
- 北京交通大学五四先锋团支部(校级) 2020

[2] 北京交通大学计算机与信息技术学院 16 硕士计科 2 班党支部书记

- 北京市红色“1+1”优秀奖(省部级) 2017

■ 获奖及荣誉称号

- | | |
|-----------------------------|------------------------|
| [1] 北京工业大学第四层次优秀人才 | 2022 |
| [2] 知行奖学金(北京交通大学研究生最高荣誉) | 2021 |
| [3] 宝钢优秀学生奖(2021 年全国 470 名) | 2021 |
| [4] 北京交通大学优秀共产党员 | 2021 |
| [5] 国家奖学金 | 2014, 2020 |
| [6] 华为奖学金 | 2021 |
| [7] 特等或一等学业奖学金 | 2015, 2017, 2019, 2021 |
| [8] 北京市优秀毕业生 | 2016 |
| [9] 北京市三好学生 | 2015 |