

吕庚育

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# ■ 教育背景

2018.09-至今 北京交通大学计算机与信息技术学院 硕博连读

2016.09-2018.07 北京交通大学计算机与信息技术学院 硕博连读

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 16 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 (CCFA, 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 (CCFA)
- [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. Wang, S. Feng. Prior Knowledge Constrained Adaptive Graph Framework for Partial Label Learning. 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 (CCFA, 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.
- [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. (CCFC, 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. Feng, W. Liu, Y. Li. Redundant Label Learning via Subspace Representation and Global

Disambiguation. ACM Transactions on Intelligent Systems and Technology. 2021

- [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

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#### ■ 学术服务

- [1] 会议程序委员会成员 / 审稿人: ICLR 2022; ICML 2021, 2022; NeurIPS 2021; CVPR 2021, 2022; ICCV 2021; ECCV 2022; AAAI 2021, 2022; 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,

### [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)

● 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] 知行奖学金(北京交通大学研究生最高荣誉) 2021

[2] 宝钢优秀学生奖(2021 年全国 470 名) 2021

[3] 北京交通大学优秀共产党员 2021

[4] 国家奖学金 2014, 2020

[5] 华为奖学金 2021

[6] 特等或一等学业奖学金 2015, 2017, 2019, 2021

[7] 北京市优秀毕业生 2016

[8] 北京市三好学生 2015

[9] 首都高校"先锋杯"优秀团员 2015