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李启磊

科研/教育经历

2020.11–2024.04: **博士，计算机科学**, 伦敦玛丽女王大学, 伦敦, 英国.
师从英国工程院院士 Shaogang Gong 教授, 课题为跨场景可泛化特征学习
毕业论文题目：From Robust to Generalizable Representation Learning for Person ReID

2017.09–2020.06: **硕士，信号与信息处理**, 四川大学, 成都, 中国.
师从吴炜教授和杨晓敏教授, 课题为基础视觉, 超分辩率, 图像增强, 遥感图像全色锐化

2013.09–2017.06: **学士，电子信息工程**, 山东理工大学, 淄博, 中国.
师从高明亮教授, 课题为目标跟踪, 车牌识别, 高斯混合模型

工作经验

Queen Mary University of London (伦敦, 英国)

2024.04--至今 **博士后研究员**.
英国 EPSRC 重点研发项目：KUber: Knowledge Delivery System For Machine Learning At Scale 主研, 设计动态拓扑多节点协同网络实现集群协作, 知识共享, 边缘计算。

Veritone Limited (伦敦分支, 美国))

2022.10–2024.04 **视频分析算法工程师**.
设计并部署了行人重识别框架, 利用基础模型, 如 ViT、CLIP 和 BLIP, 来学习精确用以检索数百万行人的代表性特征。

Vision Semantics Limited (伦敦, 英国)

2022.07–2022.10 **深度学习算法工程师**.
设计用于目标检测的大规模预训练模型, 并利用域泛化技术来提高模型在实际场景中的性能。

National University of Singapore (新加坡)

2020.08–2020.10 **科研助理**.
设计适用于真实世界的图像超分辨率模型, 协助构建高性能 GPU 计算集群。

专利申请

2022.02.24 **一种基于稀疏和滤波器的红外和可见光图像融合方法**, 第一申请人, 实质审查阶段, CN114066786A.
本发明公开了一种红外图像和可见光图像融合方法。本发明在融合红外图像和可见光图像上效果极佳, 融合结果具有丰富的细节和梯度信息。

2021.03.22 **一种基于门控多反馈网络的图像超分辨率重构方法**, 第一申请人, 实质审查阶段, CN112508779A.
本发明公开了一种门控多反馈网络的图像超分辨率重构方法, 包括将提取到的分层级特征建立反馈并利用多重反馈重建下一次迭代的网络。

2021.03.18 **基于耦合生成对抗网络的红外和可见光图像融合方法**, 第一申请人, 实质审查阶段, CN112488970A.
本发明公开了一种基于耦合生成对抗网络的红外和可见光图像融合方法能够有效地保持红外图像的热辐射信息和可见光图像的纹理信息。

2021.03.22 **一种基于稀疏表示和引导滤波的多聚焦图像融合方法**, 第一申请人, 实质审查阶段, CN112508828A.
本发明公开了一种多焦点图像融合方法, 在融合两张焦点不同的图片上效果极佳, 能够在保持原始图像的清晰度和分辨率的前提下展现更多信息。

一作科研成果 (谷歌被引 650+ 次)

截至目前第一作者发表论文 19 篇, 其中 15 篇被 SCI 期刊收录, 4 篇被 EI 会议收录。包括 JCR Q1 论文 13 篇, 中科院一区论文 5 篇 (Top5 篇), 中科院二区论文 4 篇 (Top1 篇, ESI 高被引 1 篇 *3 次). †: 共同一作。

期刊论文

[J1]. **Qilei Li, Mingliang Gao, Guisheng Zhang, et al.**, *Towards Multimodal Disinformation Detection by Vision-Language Knowledge Interaction*, In *Information Fusion, 2024, Vol. 102, pp. 102037. JCR Q1, 中科院一区 Top.*

[J2]. **Qilei Li, Mingliang Gao, Jinyong Chen, et al.**, *Generic Vehicle Association in Transport System Guided by Foundational Models*, In *IEEE Transactions on Intelligent Transportation Systems, 2025, JCR Q1, 中科院一区 Top, accept.*

[J3]. **Qilei Li, Jing-an Cheng, Mingliang Gao, et al.**, *Traffic Density Estimation by Distributed Proxy Model Learning for Internet-of-Vehicle*, In *IEEE Internet of Things Journal, 2025, JCR Q1, 中科院一区 Top, accept.*

[J4]. **Qilei Li, Lu Lu, Zhen Li, et al.**, *Coupled GAN with Relativistic Discriminators for Infrared and Visible Images Fusion*, In *IEEE Sensors Journal, 2021, Vol. 21, No. 6, pp. 7458-7467, JCR Q1, ESI 高被引 3 次, 中科院二区.*

[J5]. **Qilei Li, Wenhao Song, Mingliang Gao, et al.**, *Efficient Pansharpening by Joint-modality Recursive Training*, In *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2024, Vol. 17, pp. 13376-13386, JCR Q1, 中科院二区 Top.*

[J6]. **Qilei Li, Mingliang Gao, Guisheng Zhang, et al.**, *Defending Deepfakes by Saliency-Aware Attack*, In *IEEE Transactions on Computational Social Systems, Vol. 11, No. 4, pp. 5060-5067, Aug. 2024, JCR Q1, 中科院二区.*

[J7]. **Jinyong Chen†, Qilei Li†, Mingliang Gao, et al.**, *Towards Zero-shot Object Counting via Deep Spatial Prior Cross-modality Fusion*, In *Information Fusion, 2024, Vol. 111, pp. 102537, JCR Q1, 中科院一区 Top.*

[J8]. **Wenhao Song†, Qilei Li†, Mingliang Gao, et al.**, *SFINet: A Semantic Feature Interactive Learning Network for Full-time Infrared and Visible Image Fusion*, In *Expert Systems with Applications, 2025, Vol. 261, pp. 125472, JCR Q1, 中科院一区 Top.*

[J9]. **Guisheng Zhang†, Qilei Li†, Mingliang Gao, et al.**, *Space-Frequency and Global-Local Attentive Networks for Sequential Deepfake Detection*, In *IEEE Transactions on Computational Social Systems, 2025, JCR Q1, 中科院二区, accept.*

[J10]. **Qilei Li, Wei Wu, Lu Lu, Zuoyong Li, et al.**, *Infrared and Visible Images Fusion using Sparse Representation and Guided Filter*, In *Journal of Intelligent Transportation Systems, 2019, Vol. 24(3), pp. 254-263, JCR Q2, 中科院三区.*

[J11]. **Qilei Li, Xiaomin Yang, Wei Wu, et al.**, *Pansharpening Multispectral Remote-sensing Images with Guided Filter*, In *Concurrency and Computation: Practice and Experience, 2021, Vol. 33, No. e5074, JCR Q3, 中科院四区.*

[J12]. **Guisheng Zhang†, Qilei Li†, Mingliang Gao, et al.**, *Towards Sequential Deepfake Detection Using Deep Learning for Privacy Protection*, In *IEEE Consumer Electronics Magazine, 2025, Vol. 14, No. 2, pp. 42-48, JCR Q1, 中科院三区.*

[J13]. **Siyou Guo**†, **Qilei Li**†, **Mingliang Gao, et al.**, *Deep Learning-Based Face Forgery Detection for Facial Payment Systems*, In *IEEE Consumer Electronics Magazine, 2024, JCR Q1, 中科院三区, accept.*

[J14]. **Siyou Guo**†, **Qilei Li**†, **Mingliang Gao, et al.**, *Smart City Security: Fake News Detection in Consumer Electronics*, In *IEEE Consumer Electronics Magazine, 2024, JCR Q1, 中科院三区, accept.*

[J15]. **Jing-an Cheng**†, **Qilei Li**†, **Alireza Souri, et al.**, *Towards Trustworthy Crowd Counting by Distillation Hierarchical Mixture of Experts for Edge-based Cluster Computing*, In *Cluster Computing, 2025, JCR Q1, 中科院三区, accept.*

会议论文

[C1]. **Qilei Li, Jiabo Huang, Jian Hu, et al.**, *Feature-Distribution Perturbation and Calibration for Generalized ReID*, In *IEEE ICASSP, 2024, pp. 2880-2884, CCF-B, Oral, EI.*

[C2]. **Qilei Li, Shaogang Gong**, *Mitigate Domain Shift by Primary-Auxiliary Objectives Association for Generalizing Person ReID*, In *IEEE WACV, 2024, pp. 394-403, CORE-A, EI.*

[C3]. **Qilei Li, Jiabo Huang, Shaogang Gong**, *Local-Global Associative Frame Assemble in Video Re-ID*, In *BMVC, 2021, CORE-A, CCF-C, EI.*

[C4]. **Qilei Li**†, **Zhen Li**†, **Lu Lu, Gwanggil Jeon, et al.**, *Gated Multiple Feedback Network for Image Super-Resolution*, In *BMVC, 2019, CORE-A, CCF-C, EI.*

职责岗位

学术任职

2017-至今 IEEE Student Member

2019-至今 BMVA Member

2023-至今 ELLIS PhD Program Evaluators

会议组织

2025.07 **Workshop 主席**, ICDCS 2025, EI Compendex, CCF-B.
Federated Learning for Wireless Edge Artificial Intelligence.

2024.11 **Workshop 主席**, ICCBD +AI 2024, EI Compendex.
Advancing AIGC: Faithful Generation and Trustworthy Identification.

2024.09 **Workshop 主席**, FEICT 2024, EI Compendex.
Computer Vision Technologies for Smart City Applications.

2023.09 **Workshop 主席**, SMC-IoT 2023, EI Compendex.
Image processing and deep learning Technologies in Communication.

审稿人

IEEE Transactions on Aerospace and Electronic Systems

IEEE Transactions on Affective Computing

IEEE Transactions on Artificial Intelligence

IEEE Transactions on Broadcasting

IEEE Transactions on Cognitive and Developmental Systems

IEEE Transactions on Circuits and Systems for Video Technology

IEEE Transactions on Computational Imaging

IEEE Transactions on Consumer Electronics

IEEE Transactions on Emerging Topics in Computational Intelligence

IEEE Transactions on Fuzzy Systems

IEEE Transactions on Geoscience and Remote Sensing
IEEE Transactions on Image Processing
IEEE Transactions on Industrial Informatics
IEEE Transactions on Medical Imaging
IEEE Transactions on Mobile Computing
IEEE Transactions on Neural Networks and Learning Systems
IEEE Transactions on Neural Systems and Rehabilitation Engineering
IEEE Transactions on Pattern Analysis and Machine Intelligence
IET Computer Vision
IET Signal Processing
Information Fusion
Information Science
International Journal of Computer Vision
Knowledge-Based Systems
Machine Vision and Applications
Network-Computation in Neural Systems
Neurocomputing
Pattern Recognition

教学经历

2020-2022, 秋季: ECS795P: Deep Learning and Computer Vision, QMUL, 全英文授课
2019, 秋季: 操作系统, 四川大学
2018, 秋季: 电子设计 EDA, 四川大学
2017, 秋季: 微机原理与接口技术, 四川大学

成就 & 荣誉

2020 学术之星, 四川大学, 中国
2020 国家奖学金, 教育部, 中国
2020 CSC 奖学金, 留学基金委, 中国