



# 谢国洋

机器学习博士 · 英国萨里大学

萨里市, 吉尔福德郡, 英国

☎ (+86)13502842508 | ✉ guoyang.xie@outlook.com | 🏠 guoyang-xie.github.io | 📺 guoyang-xie |

<https://scholar.google.com/citations?user=Xd95x0cAAAAJ&hl=en>

“有志者，事竟成”

## 个人简介

我是谢国洋, 英国萨里大学 NICE 组实验室博士生 (今年 9 月底毕业), 师从于欧洲科学院院士, IEEE Fellow, IEEE 计算智能学会候任主席, 德国比勒费尔德大学洪堡人工智能教席教授金耀初。我博士题目 Automatic Industrial Image Anomaly Detection (自动化工业图像异常检测), 我的研究方向是主要人工智能在工业生产或制造中的应用, 包括能源, 通讯, 制造业, 金融业等领域。现在我手上总共有 12 篇顶会及顶刊 (4 篇 CCF-A, 1 篇 CCF-B, 4 篇 JCR1 区顶刊, 其中 2 篇是中科院 1 区)。在读博之前, 我曾在广汽研究院和百度工作, 工作方向是自动驾驶感知相关的技术开发。

## 工作经历

### 广汽研究院

感知算法室室主任

广州, 中国

2017.12 - 2019.9

- L3 和 L4 感知团队技术路线的发展以及和供应商联合开发感知算法。

### 百度自动驾驶部门

算法工程师

北京, 中国

2015.11 - 2017.11

- 3D 障碍物检测和分类。

## 教育经历

### 萨里大学

机器学习博士

吉尔福德, 英国

2019.10 - 2023.9

- 论文题目: 在转产过程当中小样本工业图像异常检测
- 导师: 金耀初教授

### 香港科技大学

机器人硕士 (学术型硕士)

香港特别行政区, 中国

2013.9 - 2015.7

- 论文题目: 自动化标定自动驾驶感知系统
- 导师: 刘明教授

### 电子科技大学

物理电子本科

成都, 中国

2009.9 - 2013.7

## 论文发表

\* 表示共同一作。

### 会议论文

1. **Guoyang, Xie\***, Jingbao Wang\*, Jiaqi Liu\*, Feng Zheng, and Yaochu Jin. "Pushing the limits of fewshot anomaly detection in industry vision: Graphcore." The Eleventh International Conference on Learning Representations (ICLR). 2023.
2. Jiaqi Liu\*, **Guoyang Xie\***, Ruitao Chen\*, Xinpeng Li, Jinbao Wang, Yong Liu, Chengjie Wang and Feng Zheng. "Real3D-AD: A Dataset of Point Cloud Anomaly Detection." NeurIPS Dataset and Benchmark Track, 2023.
3. Jinbao Wang\*, **Guoyang Xie\***, Yawen Huang\*, Yefeng Zheng, Yaochu Jin, and Feng Zheng. "FedMed-ATL: Misaligned Unpaired Cross-Modality Neuroimage Synthesis via Affine Transform Loss." In Proceedings of the 30th ACM International Conference on Multimedia (ACM MM), pp. 1522-1531. 2022.
4. Ruitao Chen\*, **Guoyang, Xie\***, Jiaqi Liu\*, Jinbao Wang, Ziqi Luo, Jinfan Wang, and Feng Zheng. "EasyNet: An Easy Network for 3D Industrial Anomaly Detection." ACM MM, 2023.
5. Zhang, Lingrui\*, Shuheng Zhang\*, **Guoyang Xie**, Jiaqi Liu, Hua Yan, Jinbao Wang, Feng Zheng, and Yaochu Jin. "What makes a good data augmentation for few-shot unsupervised image anomaly detection?" In Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR Vision Workshop), pp. 4344-4353. 2023.
6. **Guoyang Xie**, Tao Xu, Carsten Isert, Michael Aeberhard, Shaohua Li, and Ming Liu. "Online active calibration for a multi-lrf system." In 2015 IEEE 18th International Conference on Intelligent Transportation Systems(ITSC), pp. 806-811. IEEE, 2015.
7. **Guoyang Xie\***, Jiaqi Liu\*, Jinbao Wang, Yaochu Jin, and Feng Zheng. "Transfer-AD: Transferable Image Anomaly Detection in Changeover Procedure." Submitted to AAAI, 2023.

## 期刊论文

1. **Guoyang Xie\***, Jinbao Wang\*, Yawen Huang\*, Jiayi Lyu, Feng Zheng, Yefeng Zheng, and Yaochu Jin. "Cross-Modality Neuroimage Synthesis: A Survey." ACM Computing Surveys. 2023.
2. **Guoyang Xie\***, Jinbao Wang\*, Jiaqi Liu\*, Jiayi Lyu, Yong Liu, Chengjie Wang, Feng Zheng, and Yaochu Jin. "IM-IAD: Industrial image anomaly detection benchmark in manufacturing." IEEE Transactions on Cybernetics (IEEE TCYB) (Major Revision). 2023.
3. Liu, Jiaqi\*, **Guoyang Xie\***, Jinbao Wang\*, Shangnian Li, Chengjie Wang, Feng Zheng, and Yaochu Jin. "Deep Industrial Image Anomaly Detection: A Survey." Machine Intelligence Research (MIR). 2023.
4. **Guoyang Xie\***, Jinbao Wang\*, Guo Yu, Feng Zheng, and Yaochu Jin. "Tiny adversarial mulit-objective oneshot neural architecture search." Complex & Intelligent Systems (CAIS) 6 (2023): 107-109.
5. Jinbao Wang\*, **Guoyang Xie\***, Yawen Huang\*, Jiayi Lyu, Feng Zheng, Yefeng Zheng, and Yaochu Jin. "FedMed-GAN: Federated domain translation on unsupervised cross-modality brain image synthesis." Neurocomputing 546 (2023): 126282.
6. **Guoyang Xie\***, Jinbao Wang\*, Yawen Huang\*, Jiayi Lyu, Feng Zheng, Yefeng Zheng, and Yaochu Jin. "K-CROSS: K-Space-Aware Cross-Modality Score for Synthesized Neuroimage Quality Assessment." IEEE Journal of Biomedical and Health Informatics (IEEE JBHI) (Under Review). 2023.
7. Jiang, Xi\*, **Guoyang Xie\***, Jinbao Wang\*, Yong Liu, Chengjie Wang, Feng Zheng, and Yaochu Jin. "A survey of visual sensory anomaly detection." arXiv preprint arXiv:2202.07006 (2022).

## 编程技能

**Programming** Python, Matlab, C++, HTML5, LaTeX

## 学术评审

2020-2023, **Complex & Intelligent Systems**, 审稿人

2022 **AAAI**, 审稿人

2023 **NeurIPS**, 审稿人

2023 **ACM MM**, 审稿人

2023 **TEVC**, 审稿人

2023 **TETCI**, 审稿人

## Open-IAD

发起者 & 贡献者

- <https://github.com/M-3LAB/open-iad>

## Fedmed-GAN

发起者 & 贡献者

- <https://github.com/M-3LAB/FedMed-GAN>

## Awesome Industrial Anomaly Detection

发起者 & 贡献者

- <https://github.com/M-3LAB/awesome-industrial-anomaly-detection>

## Awesome Multi-Modal Brain Image Synthesis

发起者 & 贡献者

- <https://github.com/M-3LAB/awesome-multimodal-brain-image-synthesis>