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### 简短介绍

我是谢国洋，英国萨里大学 NICE 组实验室博士，师从于欧洲科学院院士，IEEE Fellow, IEEE计算智能学位侯任理事长，德国比勒菲尔德大学洪堡人工智能教席教授金耀初。我博士题目Deep Learning-based Image Anomaly Detection in Industrial Manufacturing and Medical Imaging（基于深度学习的工业图像和医疗图像异常检测）。现在我手上总共有14篇顶会及顶刊（4篇 CCF-A, 2篇 CCF-B, 4篇 JCR1区顶刊，其中3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管理和产品研发的工作。我曾在广汽研究院带领14人团队进行 L3级和L4级自动驾驶技术进行预研和开发工作。其细节会在工作经历中详细介绍

### 学习经历

英国萨里大学 – 博士-机器学习, 2019.10-2023.10

香港科技大学-硕士-机器人感知, 2013.9-2015.9

电子科技大学-本科-电子工程, 2009.9-2013.6

### 学术论文(\* 为共同一作)

1. **Guoyang Xie\***, Jinbao Wang\*, Jiaqi Liu, Yaochu Jin and Feng Zheng, “Pushing the Limits of Few Shot Anomaly Detection in Industry Vision: Graphcore”, (ICLR 2023, ML 三大会之一)
1. Jiaqi Liu\*, **Guoyang Xie\***, Ruitao Chen\*, Xinpeng Li, Jinbao Wang, Yong Liu, and Feng Zheng, “Real3D-AD: A Dataset of Point Cloud Anomaly Detection”, (NeurIPS Dataset and Benchmark Track, CCF-A)
2. 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, CCF-A)
3. **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”, (TCYB, IF: 19.217, JCR1区, 中科院1区, Minor Revision)

4. L.Zhang, S.Zhang, **Guoyang Xie**, Jiaqi Liu, Hua Yan, Jinbao Wang, and Feng Zheng, “What makes a good data augmentation for few-shot unsupervised image anomaly detection”, (CVPR Workshop 2023)
5. Jinbao Wang\*, **Guoyang Xie\***, Yawen Huang\*, Yefeng Zheng, Yaochu Jin and Feng Zheng, “FedMed-ATL: Misaligned Unpaired Cross-Modality Neuroimage Synthesis via Transform Loss”, (ACM MM 2023, CCF-A)
6. **Guoyang Xie**, Tao Xu, Carsten Iserl, Michael Aeberhard, Shaohua Li and M.Liu, “Online Active Calibration for a Multi-LRF System”, (ITSC 2015, CCF-B)
7. **Guoyang Xie\***, Yawen Huang\*, Jinbao Wang, Jiayi Lyu, Feng Zheng, Yefeng Zheng, and Yaochu Jin, “Cross-Modality Neuroimage Synthesis: A Survey”, (ACM Computing Surveys 2023, IF: 14.324, JCR-1区, 中科院1区)
8. **Guoyang Xie\***, Jinbao Wang, Guo Yu, Feng Zheng and Yaochu Jin, “Tiny Adversarial Multi-Objective One-Shot Neural Architecture Search”, (CAIS, IF: 6.72, JCR1区)
9. 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, IF: 5.719, JCR1区)
10. Jiaqi Liu\*, **Guoyang Xie\***, Jinbao Wang\*, Shangnian Li, Chengjie Wang, Feng Zheng, and Yaochu Jin, “Deep Industrial Image Anomaly Detection: A Survey”, (Machine Learning Research, 2023)
11. Jinbao Wang\*, **Guoyang Xie\***, Yawen Huang\*, Jiayi Lyu, Feng Zheng, Yefeng Zheng, and Yaochu Jin, “K-CROSS: K-Space Aware Cross-Modality Score for Synthesized Neuroimage Quality Assessment, (Submitted to JBHI, CCF-B, 中科院1区)
12. **Guoyang Xie\***, Jiaqi Liu\*, Jinbao Wang, Yaochu Jin, and Feng Zheng, “Transfer-AD: Transferable Image Anomaly Detection in Changeover Procedure”, (Submitted to AAAI 2023, CCF-A)
13. Jiang Xi\*, **Guoyang Xie\***, Jinbao Wang\*, Yong Liu, Chengjie Wang, Feng Zheng, Yaochu Jin, “A Survey of Visual Sensory Anomaly”, arXiv preprint arXiv:2202.07006

## 工作经历

首席感知智能算法工程师, 广汽研究院, 广州 – 2017.12-2019.9

1. 建立L3和L4级自动驾驶场景测试标准定义, 其中包括:
  - 车道线检测测试标准定义
  - 可行驶区域分割标准定义, 包含高速, 城区, 郊区定义
  - 目标检测标准定义, 包含高架桥, 高速路定义场景
2. 建立量产级泊车辅助算法, 其中包括:
  - Visual SLAM 算法建立

- 智能泊车场景定义
3. 建立大规模的高速道路视觉算法数据集，可支持多项任务，其中包括
- 像素级语义检测
  - 实时级目标检测

**感知智能算法工程师，百度，北京 – 2015.11-2017.11**

基于深度学习的3D障碍物识别及分类, 其中包括

- 基于forest tree 的3D目标分类
- End-to-end 3D点云障碍物检测，分类，跟踪统一框架

### 基本技能

- 英文写作和口语流利，托福:99分，GRE:325分
- 编码语言: Python, Latex, C++

### 著名学术期刊审稿人

- 2020-2023, CAIS 审稿人
- 2022, AAAI审稿人
- 2023, NeurIPS审稿人
- 2023, TEVC审稿人
- 2023, ACM MM 审稿人
- 2023, ICLR 审稿人
- 2023, TETCI 审稿人
- 2023, TNNLS 审稿人

### GITHUB REPOS(代码库)

- Open-IAD: <https://github.com/M-3LAB/open-iad>
- FedMed-GAN: <https://github.com/M-3LAB/FedMed-GAN>
- Awesome Industrial Image Anomaly Detection: <https://github.com/M-3LAB/awesome-industrial-anomaly-detection>
- Brain-GAN Survey: <https://github.com/M-3LAB/awesome-multimodal-brain-image-synthesis>