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(生日: 1992.12)

职位:哈尔滨工业大学(深圳)教授

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## ❖ 教育背景 -

• 博士

香港浸会大学 —— 计算机科学系

// 2017-2021

学士

电子科技大学 —— 电子信息工程学院

// 2011-2015

高中

深圳外国语学校

// 2008-2011

### **❖** 研究经历 ·

• **南洋理工大学,新加坡** (2023 U.S. New 世界大学排名: 30)

// 2021 – 2023

博士后研究员

合作导师: 刘子纬教授, 吕健勤教授

(刘教授为 International Journal of Computer Vision (IJCV) 副主编;

吕教授为 MMLab@NTU 负责人, International Journal of Computer Vision (IJCV) 和 IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI) 副主编)

• 香港浸会大学,香港,中国

// 2017-2021

博士生

导师: 阮邦志教授

(首席讲座教授; 国际模式识别协会(IAPR)会士)

(2019年国家教育部自然科学二等奖)

(2019年广东省自然科学一等奖)

• 约翰斯霍普金斯大学, 美国 (2023 U.S. New 世界大学排名: 7) // 2020. 02 - 2020. 07

访问学者

导师: Prof. Vishal M Patel

(Vision & Image Understanding (VIU) Lab 负责人)

(IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI) 副主编)

**商汤科技有限公司,深圳**(人工智能上市公司) 算法研究员

// 2021.07 – 2021.11

# ❖ 发表文章 [谷歌学术] -

研究方向: 多模态大模型, 及其在具身智能与安全领域的应用。

见刊论文 第一作者论文

#### 期刊论文:

- Rui Shao, Tianxing Wu, Jianlong Wu, Liqiang Nie, Ziwei Liu. "Detecting and Grounding Multi-Modal Media Manipulation and Beyond". *IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI)*, 2024. (中科院 SCI 分区: 1区; 影响因子: 23.6; CCF-A; 计算机视觉顶级期刊)
- Rui Shao, Pramuditha Perera, Pong C. Yuen, Vishal M. Patel. "Open-set Adversarial Defense with Clean-Adversarial Mutual Learning". International Journal of Computer Vision (IJCV), 2022.
   (JCR 分区: 1区; 影响因子: 13.369; CCF-A, 计算机视觉顶级期刊)
- Rui Shao, Pramuditha Perera, Pong C. Yuen, Vishal M. Patel. "Federated Generalized Face Presentation
  Attack Detection". IEEE Transactions on Neural Networks and Learning Systems (TNNLS), 2022. (中科院
  SCI 分区: 1区; 影响因子: 14.255; CCF-B; 人工智能顶级期刊)
- Rui Shao, Xiangyuan Lan, Pong C. Yuen. "Joint Discriminative Learning of Deep Dynamic Textures for 3D Mask Face Anti-spoofing". IEEE Transactions on Information Forensics and Security (TIFS), 2019.
   (中科院 SCI 分区: 1区; 影响因子: 7.231; CCF-A, 人工智能安全顶级期刊)
- Rui Shao, Xiangyuan Lan. "Adversarial Auto-encoder for Unsupervised Deep Domain Adaptation". *IET Image Processing*, 2019. (中科院 SCI 分区: 3 区; CCF-C)

#### 会议论文:

- Rui Shao, Tianxing Wu, Ziwei Liu. "Detecting and Grounding Multi-Modal Media Manipulation". IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2023. (CCF-A; 计算机视觉顶会)
- Rui Shao, Tianxing Wu, Ziwei Liu. "Detecting and Recovering Sequential DeepFake Manipulation". European Conference on Computer Vision (ECCV), 2022. (清华推荐分区 A; CCF-B; 计算机视觉顶会)
- Rui Shao, Pramuditha Perera, Pong C. Yuen, Vishal M. Patel. "Open-set Adversarial Defense". European Conference on Computer Vision (ECCV), 2020. (清华推荐分区 A; CCF-B; 计算机视觉顶会)
- Rui Shao, Xiangyuan Lan, Pong C. Yuen. "Regularized Fine-grained Meta Face Anti-spoofing". Thirty-Fourth AAAI Conference on Artificial Intelligence (AAAI), 2020. (CCF-A; 人工智能顶会)
- Rui Shao, Xiangyuan Lan, Jiawei Li, Pong C. Yuen. "Multi-adversarial Discriminative Deep Domain Generalization for Face Presentation Attack Detection". IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2019. (CCF-A; 计算机视觉顶会)
- Rui Shao, Xiangyuan Lan, Pong C. Yuen. "Feature Constrained by Pixel: Hierarchical Adversarial Deep Domain Adaptation". ACM International Conference on Multimedia (ACM MM), 2018. (CCF-A; 多媒体顶会)
- Rui Shao, Bochao Zhang, Pong C. Yuen, Vishal M. Patel. "Federated Test-Time Adaptive Face Presentation Attack Detection with Dual-Phase Privacy Preservation". IEEE International Conference on Automatic Face and Gesture Recognition (FG), 2021. (清华推荐分区 B; CCF-C; 生物特征识别顶会)
- Rui Shao, Xiangyuan Lan, Pong C. Yuen. "Deep Convolutional Dynamic Texture Learning with Adaptive Channel-discriminability for 3D Mask Face Anti-spoofing". International Joint Conference on Biometrics (IJCB), 2017. (清华推荐分区 B; CCF-C; 生物特征识别顶会)

## 协同作者论文:

- Xinyu Hou, Liming Jiang, **Rui Shao**, Chen Change Loy. "Video Infilling with Rich Motion Prior". British Machine Vision Conference (BMVC), 2023. (清华推荐分区 B; CCF-C; 计算机视觉旗舰会议)
- Xiangyuan Lan, Mang Ye, **Rui Shao**, Bineng Zhong, Pong C. Yuen, Huiyu Zhou. "Learning Modality-Consistency Feature Templates: A Robust RGB-Infrared Tracking System". *IEEE Transactions on Industrial Electronics (TIE)*, 2019. (中科院 SCI 分区: 1 区; 影响因子: 8.236)

Chong Yin, Siqi Liu, Rui Shao, Pong C. Yuen. "Focusing on Clinically Interpretable Features: Selective
Attention Regularization for Liver Biopsy Image Classification". Medical Image Computing and Computer
Assisted Interventions (MICCAI), 2021. (CCF-B; 医学图像顶级会议)

#### 预印版论文(\*为通讯作者)

- Gongwei Chen, Leyang Shen, **Rui Shao**\*, Xiang Deng, Liqiang Nie\*. "LION: Empowering Multimodal Large Language Model with Dual-Level Visual Knowledge". *arXiv preprint arXiv:2311.11860, 2023*. (在多模态 大模型 13 个评测任务上达到了国际领先水平)
- **Rui Shao,** Tianxing Wu, Liqiang Nie, Ziwei Liu. "DeepFake-Adapter: Dual-Level Adapter for DeepFake Detection". *arXiv preprint arXiv:2306.00863, 2023*.
- **Rui Shao,** Tianxing Wu, Ziwei Liu. "Robust Sequential DeepFake Detection". *arXiv preprint arXiv:2309.14991, 2023.*

## ❖ 比赛经历 -

- 国际多媒体分析检索比赛 TRECVID2016 平均检索准确率排名世界第一
- 国际多媒体分析检索比赛 TRECVID2015 八项排名世界第一

### ◆ 学术服务・

• 程序委员会成员:

AAAI Conference on Artificial Intelligence (AAAI), 2021, 2022, 2023 Workshop on Audiovisual Deepfake Generation and Detection, ACM MM 2021

特邀审稿人:

期刊: IEEE Transactions on Pattern Analysis and Machine Intelligence

International Journal of Computer Vision

**IEEE Transactions on Neural Networks and Learning Systems** 

IEEE Transactions on Information Forensics and Security

IEEE Transactions on Circuits and Systems for Video Technology

Journal of Selected Topics in Signal Processing

**Neural Networks** 

Pattern Recognition

会议: CVPR, ICCV, ECCV, NeurIPS, ICML, ICLR, AAAI, IJCAI, ACM MM, ICPR, ICB

• 学生志愿者: IAPR/IEEE Winter School on Biometrics 2017

# ❖ 荣誉和奖励 -

- 2019-2020 最佳研究表现奖,香港浸会大学计算机系
- 2018-2019 最佳研究表现奖,香港浸会大学计算机系
- 2017-2018 最佳研究表现奖,香港浸会大学计算机系
- 2013-2014 人民奖学金, 电子科技大学
- 2012-2013 人民奖学金, 电子科技大学
- 2011-2012 人民奖学金, 电子科技大学