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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** (2022 U.S. New 世界大学排名: 33) // 2021 – 至今
博士后研究员
导师: 吕健勤教授, 刘子纬教授,
(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)
研究方向: 深度伪造人脸的生成和检测
- **香港浸会大学, 香港, 中国** // 2017-2021
博士生
导师: 阮邦志教授
(首席教授; 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)
研究方向: 深度学习的鲁棒性能和泛化性能, 应用到人脸识别系统的攻击防御和对抗攻击防御
- **约翰斯霍普金斯大学, 美国** (2022 U.S. New 世界大学排名: 9) // 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)
研究方向: 视觉系统的对抗攻击与防御, 开放类别的图像识别

- 商汤科技有限公司，深圳（人工智能上市公司）

// 2021.07 – 2021.11

算法研究员

研究方向：OpenMMLab 3D Human Parametric Model 工具包和代码库的构建

❖ 发表文章

见刊论文

第一作者论文

期刊论文：

- **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. (中科院 SCI 分区: 1 区; 影响因子: 7.410; 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: 10.451; 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: 7.178; 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**, Pramuditha Perera, Pong C. Yuen, Vishal M. Patel. "Open-set Adversarial Defense". *European Conference on Computer Vision (ECCV)*, 2020. (CCF-B; 计算机视觉顶会)
- **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. (CCF-C; 生物特征识别顶会)
- **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**, 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. (CCF-C; 生物特征识别顶会)

协同作者论文

- 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)
- Xiangyuan Lan, Mang Ye, **Rui Shao**, Bineng Zhong, Deepak Kumar Jain, Huiyu Zhou. "Online Non-Negative Multi-Modality Feature Template Learning for RGB-Assisted Infrared Tracking". *IEEE Access*, 2019. (中科院 SCI 分区: 3 区; 影响因子: 3.367)
- 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. (医学图像顶级会议)

在投论文

- **Rui Shao**, Tianxing Wu, Ziwei Liu. "Detecting and Recovering Sequential DeepFake Manipulation". *European Conference on Computer Vision (ECCV)*, 2022. (计算机视觉顶会; 会议评审阶段)

技术报告

- Lei Yao, Mang Ye, Dongjing Liu, **Rui Shao**, Tao Liu, Jun Liu, Zheng Wang, Chao Liang. "WHU-NERCMS at TRECVID2015: Instance Search Task". *Participant Notebook Paper, TRECVID*, 2015.
- Zheng Wang, Yang Yang, Shuosun Guan, Chenxia Han, Jiamei Lan, **Rui Shao**, Jinqiao Wang, Chao Liang. "WHU-NERCMS at TRECVID2016: Instance Search Task". *Participant Notebook Paper, TRECVID*, 2016. (视频检索国际权威评测全球排名第 4)

❖ 学术服务

- **程序委员会成员**: Thirty-Fourth AAAI Conference on Artificial Intelligence (AAAI), 2021, 2022
- **特邀审稿人**:
 - 期刊: IEEE Transactions on Pattern Analysis and Machine Intelligence, IEEE Transactions on Information Forensics and Security, Neural Networks, Pattern Recognition, Journal of Selected Topics in Signal Processing, Journal of Electronic Imaging
 - 会议: CVPR, ICCV, ECCV, NeurIPS, 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