Bo Miao

EDUCATION

The University of Western Australia, Perth, Australia

Jan. 2021-Current

Ph.D. student in Computer Science (CS) Ph.D. Topic: Video object segmentation.

Supervisors: Professor <u>Ajmal Mian</u> and Professor <u>Mohammed Bennamoun</u>

University of Jinan, Jinan, China

Sept. 2015-Jun. 2018

Master's Degree in Signal and Information Processing (EE)

Dissertation: Research on Classification of ADHD Based on Feature Selection in Resting-state fMRI.

Supervisor: Professor Yulin Zhang

University of Jinan, Jinan, China

Sept. 2011-Jun. 2015

Double Bachelor's Degrees in Communication Engineering (EE) and Accounting

PROFESSIONAL EXPERIENCES

Research Assistant, The Chinese University of Hong Kong, Shenzhen, China

05/2020-12/2020

Robotics & Artificial Intelligence Laboratory Supervisor: Assistant Professor <u>Tin Lun Lam</u>

- Carried out indoor scene recognition based on scene parsing and attention mechanism;
- Carried out video anomaly detection based on self-supervised learning and memory networks.

Machine Learning Engineer, SINA Weibo, China

07/2018-09/2019

Machine Learning R&D Department

- Carried out million-level blog data processing using Storm and video recognition using PyTorch;
- Developed personalized blog recommendations using C++;
- Analyzed blog data performance using MySQL, Hive, Redis, and Kafka.

PUBLICATIONS

Conference:

- *Bo Miao*, Mohammed Bennamoun, Yongsheng Gao, Ajmal Mian, "Spectrum-guided Multi-granularity Referring Video Object Segmentation", *International Conference on Computer Vision (ICCV)*, 2023.
- *Bo Miao*, Mohammed Bennamoun, Yongsheng Gao, Ajmal Mian, "Self-Supervised Video Object Segmentation by Motion-Aware Mask Propagation", *IEEE International Conference on Multimedia and Expo (ICME)*, 2022. **Oral**
- *Bo Miao*, Mohammed Bennamoun, Yongsheng Gao, Ajmal Mian, "Regional Video Object Segmentation by Efficient Motion-Aware Mask Propagation", *International Conference on Digital Image Computing: Techniques and Applications (DICTA)*, 2022.
- *Bo Miao*, Liguang Zhou, Ajmal Mian, Tin Lun Lam, Yangsheng Xu, "Object-to-Scene: Learning to Transfer Object Knowledge to Indoor Scene Recognition", *IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*, 2021.
- *Bo Miao*, Junling Guan, Liangliang Zhang, Qingfang Meng, Yulin Zhang, "Automated epileptic seizure detection method based on the multi-attribute EEG feature pool and mRMR feature selection method", *International Conference on Computational Science (ICCS)*, 2019.
- Bo Miao, Yulin Zhang, "A Feature Selection Method for Classification of ADHD", International Conference on Information, Cybernetics and Computational Social Systems (ICCSS), 2017. Best Paper
- Bo Miao, Junling Guan, Qingfang Meng, Yulin Zhang, "Fractional amplitude of low-frequency

fluctuation and degree centrality in autistic children: a resting-state fMRI study", *International Workshop on Pattern Recognition (IWPR)*, 2018.

Journal:

- *Bo Miao*, Mohammed Bennamoun, Yongsheng Gao, Ajmal Mian, "Region Aware Video Object Segmentation with Deep Motion Modeling", *arXiv*, 2022.
- *Bo Miao*, L. L. Zhang, J. L. Guan, Q. F. Meng, Y. L. Zhang, "Classification of ADHD individuals and neurotypicals using reliable RELIEF: A resting-state study", *IEEE Access*, 2019.

LANGUAGE & SKILLS

- Language: Mandarin (native), TOEFL (97, R25, L25, S21, W26)
- Programming: PyTorch, Python, C++, MATLAB, Java, Shell, Latex
- Data Storage: MySQL, Hive, Redis, Kafka, etc.

PROFESSIONAL ACTIVITIES

Conference Reviewer: CVPR, ICCV, ECCV, IROS, DICTA

Journal Reviewer: IEEE Transactions on Image Processing, IET Image Processing, Biomedical Engineering

Online, IEEE Access,

Session chair of IROS 2021, "Recognition"