

Mr. Bo Miao
School of Physics, Maths and Computing



Biography

I am a third-year Ph.D. student at CS, the University of Western Australia. My research interest mainly falls on **deep learning** (e.g. self-supervised learning) and **computer vision** (e.g. video segmentation).

Employment

Doctor of Philosophy, School of Physics, Maths and Computing

11 Jan 2021 → present

Research outputs

Region Aware Video Object Segmentation With Deep Motion Modeling

Miao, B., Bennamoun, M., Gao, Y. & Mian, A., 29 Mar 2024, In: IEEE Transactions on Image Processing. 33, p. 2639-2651 13 p.

Towards Temporally Consistent Referring Video Object Segmentation

Miao, B., Bennamoun, M., Gao, Y., Shah, M. & Mian, A., 28 Mar 2024.

Spectrum-guided Multi-granularity Referring Video Object Segmentation

Miao, B., Bennamoun, M., Gao, Y. & Mian, A., 6 Oct 2023, *2023 IEEE/CVF International Conference on Computer Vision (ICCV)*. IEEE DataPort, p. 920-930 11 p. 10376621. (Proceedings of the IEEE International Conference on Computer Vision).

Regional Video Object Segmentation by Efficient Motion-Aware Mask Propagation

Miao, B., Bennamoun, M., Gao, Y. & Mian, A., 2 Dec 2022, *2022 International Conference on Digital Image Computing: Techniques and Applications (DICTA)*. IEEE, Institute of Electrical and Electronics Engineers, p. 1-6 6 p. 10034578. (2022 International Conference on Digital Image Computing: Techniques and Applications, DICTA 2022).

Self-Supervised Video Object Segmentation by Motion-Aware Mask Propagation

Miao, B., Bennamoun, M., Gao, Y. & Mian, A., 2022, *ICME 2022 - IEEE International Conference on Multimedia and Expo 2022, Proceedings*. IEEE, Institute of Electrical and Electronics Engineers, (Proceedings - IEEE International Conference on Multimedia and Expo; vol. 2022-July).

Object-to-Scene: Learning to Transfer Object Knowledge to Indoor Scene Recognition

Miao, B., Zhou, L., Mian, A. S., Lam, T. L. & Xu, Y., 2021, *IEEE/RSJ International Conference on Intelligent Robots and Systems, IROS 2021*. IEEE, Institute of Electrical and Electronics Engineers, p. 2069-2075 7 p. (IEEE International Conference on Intelligent Robots and Systems).

Automated Epileptic Seizure Detection Method Based on the Multi-attribute EEG Feature Pool and mRMR Feature Selection Method

Miao, B., Guan, J., Zhang, L., Meng, Q. & Zhang, Y., 8 Jun 2019, *Computational Science - ICCS 2019*. Rodrigues, J. M. F., Cardoso, P. J. S., Monteiro, J., Lam, R., Krzhizhanovskaya, V. V., Lees, M. H., Sloot, P. M. A. & Dongarra, J. J. (eds.). Springer Nature, Vol. 11538. p. 45-59 15 p. (Lecture Notes In Computer Science).

Classification of ADHD Individuals and Neurotypicals Using Reliable RELIEF: A Resting-State Study

Miao, B., Zhang, L. L., Guan, J. L., Meng, Q. F. & Zhang, Y. L., 9 May 2019, In: IEEE Access. 7, p. 62163-62171 9 p., 8710305.

A feature selection method for classification of ADHD

Miao, B. & Zhang, Y., 31 Oct 2017, *ICCSS 2017 - 2017 International Conference on Information, Cybernetics, and Computational Social Systems*. IEEE, Institute of Electrical and Electronics Engineers, p. 21-25 5 p. 8091376. (ICCSS 2017 - 2017 International Conference on Information, Cybernetics, and Computational Social Systems).

Prizes/awards

3rd place in the ICCV 2023 Referring VOS Track at Large-scale VOS Challenge

Miao, Bo (Recipient), Oct 2023

ICCSS Best Paper Award

Miao, Bo (Recipient), 2017

UWA CSSE HDR Conference Excellent Presentation Award

Miao, Bo (Recipient), 2023

Datasets

OVOS Occluded Video Object Segmentation dataset

Miao, B. (Creator), Bennamoun, M. (Creator), Gao, Y. G. (Creator) & Mian, A. (Creator), IEEE DataPort, 18 Jul 2022
DOI: 10.21227/6w7a-qq88, <https://iee-dataport.org/documents/ovos-occluded-video-object-segmentation-dataset>