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Yingyu Wang

EDUCATION

University of Technology Sydney

Ph.D. student in Robotics, expected June 2025

- Supervisor: Prof. Shoudong Huang and Dr. Liang Zhao

Sydney, Australia Jul. 2021 - Present

Ocean University of China

Master in Computer Sciense

- Supervisor: Prof. Junyu Dong

Qingdao, China

Sept. 2017 - Jun. 2020

Chengdu University of Technology

Bachelor in Computer Sciense

Chengdu, China Sept. 2013 - Jun. 2017

PUBLICATIONS

- [1] Y. Wang, L. Zhao, and S. Huang, "Occupancy-slam: An efficient and robust algorithm for simultaneously optimizing robot poses and occupancy map", in *Under Review*.
- [2] Y. Wang, L. Zhao, and S. Huang, "Grid-based submap joining: An efficient algorithm for simultaneously optimizing global occupancy map and local submap frames", in *IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)* 2024.
- [3] Y. Wang, Y. Ju, M. Jian, K.-M. Lam, L. Qia, and J. Dong, "Self-supervised depth completion with attention-based loss", in *International Workshop on Advanced Imaging Technology (IWAIT) 2020*, SPIE, vol. 11515, 2020, pp. 517–524.
- [4] L. Zhao, Y. Wang, and S. Huang, "Occupancy-SLAM: Simultaneously Optimizing Robot Poses and Continuous Occupancy Map", in *Proceedings of Robotics: Science and Systems*, New York City, NY, USA, Jun. 2022.
- [5] Y. Zhang, Y. Wang, J. Dong, L. Qi, H. Fan, X. Dong, M. Jian, and H. Yu, "A joint guidance-enhanced perceptual encoder and atrous separable pyramid-convolutions for image inpainting", *Neurocomputing*, vol. 396, pp. 1–12, 2020.
- [6] Y. Ju, M. Jian, S. Guo, Y. Wang, H. Zhou, and J. Dong, "Incorporating lambertian priors into surface normals measurement", *IEEE Transactions on Instrumentation and Measurement*, vol. 70, pp. 1–13, 2021.
- [7] Y. Ju, X. Dong, Y. Wang, L. Qi, and J. Dong, "A dual-cue network for multispectral photometric stereo", Pattern Recognition, vol. 100, p. 107162, 2020.

PATENTS

1. Junyu Dong, Jie Gao, Hao Fan, Jun Chi, **Yingyu Wang**, 3D Imaging Device and Method based on Multi-spectral Photometric Stereo and Laser Scanning, *Invention Patent in China*.

Professional Service

• Reviewer for Journal:

The International Journal of Robotics Research (IJRR) IEEE Transactions on Robotics (T-RO)

• Reviewer for Conference:

IEEE International Conference on Robotics and Automation (ICRA) IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)

• Teaching:

Tutor for UTS 49928 Design Optimisation for Manufacturing in 2022 and 2023