CURRICULUM VITAE

Zhehua Mao (Ph.D. Candidate)

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Research Interests	Simultaneous Localization and Mapping (SLAM), Surgical Robotics, Computer-Assisted Intervention, Medical Image Computing
Education Ph.D. (Aug. 2019-Feb. 2023) M.S. (Sep. 2015-Jun. 2018) B.S. (Sep. 2009-Jun. 2013)	● University of Technology Sydney (UTS), Sydney, Australia ● Precision Instrument and Machinery, University of Science and Technology of China (USTC), Anhui, China ● Mechanical Design, Manufacturing and Automation, Hefei University of Technology (HFUT), Anhui, China
Working Experiences (Feb. 2020-Present) (Jul. 2013-Jul.2014)	● Casual Staff (Tutor) in University of Technology Sydney (UTS), Sydney, Australia ● Research & Development Engineer in Nanjing High Accurate Drive Equipment Manufacturing Group Co., Ltd., Jiangsu, China
Computer Skills	Matlab, Python, C++, CAD software (auto CAD, Solidworks, UG), Ansys, Origin.
Honors & Awards	● 2022, MICCAI2022 Travel Award ● 2019-2023 UTS President's Scholarship ● 2018 Excellent Graduate of University of Science and Technology of China ● 2017 China National Scholarship ● 2015, 2016, 2017 Scholarship of Academic Excellence
Language	● Mandarin, English

Latest Publications

1. **Zhehua Mao**, Liang Zhao, Shoudong Huang, Yiting Fan, and Alex Pui-Wai Lee, "Direct Simultaneous Multi-Image Registration", in *International Conference on Medical Image Computing and Computer-Assisted Intervention (MICCAI)*, Springer, Cham, 2022. https://doi.org/10.48550/arXiv.2105.10087

2. **Zhehua Mao**, Liang Zhao, Shoudong Huang, Yiting Fan, and Alex Pui-Wai Lee, "Complete region of interest reconstruction by fusing multiview deformable three-dimensional transesophageal echocardiography images," *Med. Phys.*, 2022. https://doi.org/10.1002/mp.15910

3. **Zhehua Mao**, Liang Zhao, Shoudong Huang, Yiting Fan, and Alex Pui-Wai Lee, "Direct bundle adjustment for 3D image fusion with application to transesophageal echocardiography," in *2021 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*, 2021. https://doi.org/10.1109/IROS51168.2021.9636721

4. Liang Zhao, **Zhehua Mao**, and Shoudong Huang, "Feature-Based SLAM: Why Simultaneous Localisation and Mapping?", in *Robotics: Science and Systems (RSS)*, 2021. https://doi.org/10.15607/rss.2021.xvii.009

5. **Zhehua Mao**, Liang Zhao, Shoudong Huang, Yiting Fan, and Alex Pui-Wai Lee, "Direct 3D ultrasound fusion for transesophageal echocardiography," *Comput. Biol. Med.*, vol. 134, no. 104502, p. 104502, 2021. https://doi.org/10.1016/j.compbiomed.2021.104502

For more papers published during my master's degree, please refer to my home webpage on Google Scholar.