

# CURRICULUM VITAE

Zhehua Mao (Ph.D. Candidate)

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<b>Research Interests</b>	Simultaneous Localization and Mapping (SLAM), Surgical Robotics, Computer-Assisted Intervention, Medical Image Computing
<b>Education</b>  Ph.D. (Aug. 2019-Feb. 2023)  M.S. (Sep. 2015-Jun. 2018)  B.S. (Sep. 2009-Jun. 2013)	<ul style="list-style-type: none"><li>● University of Technology Sydney (UTS), Sydney, Australia</li><li>● Precision Instrument and Machinery, University of Science and Technology of China (USTC), Anhui, China</li><li>● Mechanical Design, Manufacturing and Automation, Hefei University of Technology (HFUT), Anhui, China</li></ul>
<b>Working Experiences</b>  (Feb. 2020-Present)  (Jul. 2013-Jul.2014)	<ul style="list-style-type: none"><li>● Academic Tutor in University of Technology Sydney (UTS), Sydney, Australia</li><li>● Research &amp; Development Engineer in Nanjing High Accurate Drive Equipment Manufacturing Group Co., Ltd., Jiangsu, China</li></ul>
<b>Computer Skills</b>	Matlab, Python, C++, CAD software (auto CAD, Solidworks, UG), Ansys, Origin.
<b>Honors &amp; Awards</b>	<ul style="list-style-type: none"><li>● 2022, MICCAI2022 Travel Award</li><li>● 2019-2023 UTS President's Scholarship</li><li>● 2018 Excellent Graduate of University of Science and Technology of China</li><li>● 2017 National Scholarship</li><li>● 2015, 2016, 2017 Scholarship of Academic Excellence</li></ul>
<b>Academic Activities</b>	<ul style="list-style-type: none"><li>● Reviewer of 2022 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS 2022)</li><li>● Reviewer of IROS 2021</li><li>● Session Chair of IROS 2021</li></ul>

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## 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. (IF=4.506)  
<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. (IF=6.698)  
<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](#).

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