

HUANG Huajian(黄华健)

Gender: Male

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Homepage: <https://huajianup.github.io/>

I am pursuing PhD in the Hong Kong University of Science and Technology, advised by Professor Sai-Kit Yeung. I have passion in SLAM (simultaneous localization and mapping) and reconstruction. Recently I am exploring omnidirectional vision for various tasks of computer vision and robotics.

Research topic

Computer vision, SLAM, 3D reconstruction

Education

09/2014 -- 06/2018 **Sun Yat-sen University (B.Eng)**
Major in Communication Engineering

08/2019 -- **The Hong Kong University of Science and Technology (PhD)**
Major in Computer Science and Engineering

Publications

- 2022 **360VO: Visual Odometry Using A Single 360 Camera**
Huajian, Huang and Sai-Kit Yeung
In Proc. of the IEEE International Conference on Robotics and Automation (ICRA)
- SiamX: An Efficient Long-term Tracker Using Cross-level Feature Correlation and Adaptive Tracking Scheme**
Huajian, Huang and Sai-Kit Yeung
In Proc. of the IEEE International Conference on Robotics and Automation (ICRA)
- 360ST-Mapping: An Online Semantics-Guided topological mapping Module for Omnidirectional Visual SLAM**
Hongji Liu, *Huajian Huang*, Sai-Kit Yeung and Ming Liu
In Proc. of International Conference on Intelligent Robots and Systems (IROS)
- 2020 **Dual-SLAM: A framework for robust single camera navigation**
Huajian Huang, Wen-Yan Lin, Siying Liu, Dong Zhang and Sai-Kit Yeung
Project page: https://huajianup.github.io/research/Dual_SLAM/
Code: https://github.com/HuajianUP/Dual_SLAM
In Proc. of International Conference on Intelligent Robots and Systems (IROS)
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Intern

2017 -- 2018 **Research Assistant**
ADSC/Illinois at Singapore Pte Ltd

Related Experience

2014 -- 2017 won the university scholarship for three years in succession

12/2016 -- 06/2017 Information Science & Technology Developing Center for SYSU Students

- Vice Minister of Electronic Design Club

08/2016 -- 05/2017 "Challenge Cup" Undergraduate Curricular Academic Science and Technology Works

- design and develop a smart cushion system that can determine sitting posture and record time to help people keep healthy
- won the second prize in the 14th Challenge Cup

11/2015 -- 08/2016 The 11th NXP Cup National University Students Intelligent Car Race

- Project leader in SYSU

03/2015 -- 10/2015 China Robotics Competition & RoboCup

- responsible for embedded development.
- won the first prize
