Huajian HUANG

✉ huajian.huang99@gmail.com
✉ hhuangbg@connect.ust.hk
🌐 https://huajianup.github.io

Education

Ph.D. in Computer Science and Engineering *August 2019 – 2023 (Expected)*
Department of Computer Science and Engineering *Hong Kong, China*
The Hong Kong University of Science and Technology
Supervisor: Prof. Sai-Kit Yeung

Bachelor in Telecommunication Engineering *August 2014 – June 2018*
School of Electronics and Information Technology *GuangZhou, China*
Sun Yat-Sen University

Research Interest

Omnidirectional Perception, Computer Vision, Robotics, Localization and Mapping, 3D Reconstruction, Neural Rendering

Projects and Publications

360VOT: A New Benchmark Dataset for Omnidirectional Visual Object Tracking
Huajian Huang, Yinzhe Xu, Yingshu Chen and Sai-Kit Yeung
International Conference on Computer Vision (ICCV), 2023

Real-Time Omnidirectional Roaming in Large Scale Indoor Scenes
Huajian Huang, Yingshu Chen, Tianjia Zhang and Sai-Kit Yeung
SIGGRAPH Asia Technical Communications, 2022

360ST-Mapping: An Online Semantics-Guided Topological Mapping Module for Omnidirectional Visual SLAM
Hongji Liu, Huajian Huang, Sai-Kit Yeung and Ming Liu
International Conference on Intelligent Robots and Systems (IROS), 2022

360VO: Visual Odometry Using A Single 360 Camera
Huajian Huang and Sai-Kit Yeung
International Conference on Robotics and Automation (ICRA), 2022

SiamX: An Efficient Long-term Tracker Using Cross-level Feature Correlation and Adaptive Tracking Scheme
Huajian Huang and Sai-Kit Yeung
International Conference on Robotics and Automation (ICRA), 2022

Dual-SLAM: A framework for robust single camera navigation
Huajian Huang, Wen-Yan Lin, Siying Liu, Dong Zhang and Sai-Kit Yeung
International Conference on Intelligent Robots and Systems (IROS), 2020

Professional Activities

Review: TOG, SIGGRAPH, SIGGRAPH Asia, ICCV, CVPR, ICRA, and IROS

Research Experience

University of Southern California *April 2023 – Present*
Visiting scholar *Los Angeles, USA*
Institute for Creative Technologies, Vision & Graphics Lab
Advisor: Yajie Zhao

(A*STAR) Agency for Science, Technology and Research *January 2023 – March 2023*
OVERSEAS-Foreign Student Attachment *Singapore*
Centre for Frontier AI Research
Advisor: Ivor Tsang and Yaxin Shi

ADSC/Illinois at Singapore Pte Ltd *2017 – 2018*
Research Intern *Singapore*
Advisor: Wen-Yan Lin

Teaching Experience

Teaching Assistant
The Hong Kong University of Science and Technology

- COMP 1021 Introduction to Computer Science *Fall 2020, Spring 2021*
- COMP 2012 Object-Oriented Programming and Data Structures *Fall 2021*
- COMP 4431 Multimedia Computing *Spring 2020*
- ISDN 2300 Digital Design *Fall 2020*
- ISDN 5300 Advanced Digital Design *Spring 2022*