

Huan Yin

[Google Scholar](#) ◇ [Faculty Profile](#) ◇ [Homepage](#) ◇ [Web of Science \(Publons\)](#)

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RESEARCH INTERESTS

Robotics, Autonomy, Navigation, Perception, State Estimation, SLAM, Planning, Deep Learning, LiDAR, Radar, Visual, Sensor Fusion, Place Recognition, Point Cloud Registration, Field Robots, Construction Automation, Service Robot, Autonomous Driving, Tactile Sensing, Robot Learning

WORK EXPERIENCE

Research Assistant Professor

May 2022 - Present

Hong Kong University of Science and Technology, Hong Kong

Department of Electronic and Computer Engineering & [Cheng Kar-Shun Robotics Institute](#)

PI: [Prof. Fumin Zhang](#) (May 2024-Now)

PI: [Prof. Shaojie Shen](#) (May 2022-May 2024)

Research Fellow

December 2021 - May 2022

National University of Singapore, Singapore

Department of Civil and Environmental Engineering & [Advanced Robotics Centre](#)

PI: [Dr. Justin Yeoh](#) Director: [Prof. Marcelo Ang](#)

EDUCATION

PhD in Control Engineering

September 2016 - July 2021

Zhejiang University, China

College of Control Science and Engineering

Supervisor: [Prof. Rong Xiong](#) Co-Supervisor: [Prof. Yue Wang](#)

Visiting Scholar

June 2018 - September 2018

University of Technology Sydney, Australia

[Centre for Autonomous Systems](#)

PI: [Prof. Shoudong Huang](#)

Bachelor in Electronics

September 2012 - July 2016

Zhejiang University, China

College of Biomedical Engineering and Instrument Science

TEACHING

Full-time Instructor

ELEC 3210 - Introduction to Mobile Robotics

Fall 2023

HKUST UG lectures ([Syllabus 2023](#)). Transferred to Prof. Shaojie Shen in Fall 2024 ([Syllabus 2024](#)).

EMIA 6500B - Pro. Dev. in Intelligent Construction and Robotics

Spring 2023

HKUST PG seminars. Seminars on construction automation.

Substitute Teaching

ELEC 5660 - Introduction to Aerial Robotics

Spring 2023, Spring 2024

HKUST PG lectures. Six hours on optical flow and stereo vision.

IIMP 6050 - Advanced Engineering Analysis

Fall 2022

HKUST PG lectures. Six hours on introduction to mobile robots and SLAM.

AWARD

- *Best Poster Award*, granted by the 2024 ICRA Workshop: Radar in Robotics, May 2024
- *Wu Wenjun Artificial Intelligence Science and Technology Award, Nomination of Outstanding Doctoral Dissertation*, granted by the Chinese Association for Artificial Intelligence, March 2023
- *Second Prize of Invention and Entrepreneurship*, granted by the China Association of Inventions, November 2022
- *Outstanding Doctoral Dissertation Award*, granted by Zhejiang University, March 2022
- *Z2 of 2021 33rd Chinese Control and Decision Conference*, Kunming, China, May 2021
- *Best Conference Paper Award* of IEEE International Conference on Real-time Computing and Robotics, Hokkaido, Japan, October 2020
- *Second Place of Kid-size Group* of World RoboCup League, Leipzig, Germany, July 2016
- *Bachelor's Thesis Award*, granted by Zhejiang University, June 2016

INVITED TALK

- *HKUST STEM Education*, Hong Kong, September 2025
- *Zhejiang University, Ocean College*, China, July 2024
- *Hong Kong University of Science and Technology (Guangzhou)*, China, May 2024
- *University of Edinburgh*, United Kingdom, April 2024
- *Hong Kong Polytechnic University*, Hong Kong, March 2024
- *University of Michigan-Dearborn*, United States of America, January 2024
- *Eastern Institute of Technology, Ningbo*, China, December 2023
- *Nanyang Technological University*, Singapore, September 2023
- *Hong Kong Sino Group*, Hong Kong, August 2023
- *University College London*, United Kingdom, June 2023
- *Hunan University*, China, April 2023
- *Hong Kong Center for Construction Robotics*, Hong Kong, December 2022
- *University of Macau*, Macau, November 2022

ACADEMIC SERVICE

Invited as

- *Associate Editor*, InUS Transactions ([website](#)), 2025-2027
- *Associate Editor*, CAAI Transactions on Intelligence Technology ([website](#)), 2025-2027
- *Associate Editor*, 2026 IEEE Conference on Robotics and Automation (ICRA)
- *Associate Editor*, 2025 IEEE Conference on Robotics and Automation (ICRA)
- *Associate Editor*, 2024 IEEE Conference on Robotics and Automation (ICRA)
- *Associate Editor*, 2022 IEEE Conference on Robotics and Automation (ICRA)
- *Guest Editor*, Electronics, 2023 Special Issue on Autonomous Vehicles: Path Planning and Navigation ([website](#))

- *Technical Program Committee*, 2025 International Conference on Automation, Control and Robotics Engineering (CACRE) ([website](#))

Invited as a Reviewer for

- Nature, 2025×1
- (AdHoc) Ad Hoc Networks, 2021×1
- (SciRep) Scientific Reports, 2021×1
- (SatNav) Satellite Navigation, 2024×2
- (SensJ) IEEE Sensors Journal, 2025×1
- (JFR) Journal of Field Robotics, 2025×1
- (CSR) IET Cyber-Systems and Robotics, 2025×1
- (RAS) Robotics and Autonomous Systems, 2023×1
- (RIA) Robotic Intelligence and Automation, 2025×2
- (T-RO) IEEE Transactions on Robotics, 2021×2, 2024×1
- (IJCV) International Journal of Computer Vision, 2022×1
- (T-II) IEEE Transactions on Industrial Informatics, 2025×2
- (T-IE) IEEE Transactions on Industrial Electronics, 2020×2
- (GRSL) IEEE Geoscience and Remote Sensing Letters, 2025×1
- (AIAS) Artificial Intelligence and Autonomous Systems, 2024×2
- (AutCon) Automation in Construction, 2023×1, 2024×1, 2025×1
- (T-IV) IEEE Transactions on Intelligent Vehicles, 2021×1, 2024×2
- (IJRR) International Journal of Robotics Research, 2022×1, 2023×1
- (T-FR) IEEE Transactions on Field Robotics, 2022×2, 2023×1, 2024×1
- (ICRA) IEEE Conference on Robotics and Automation, 2022×5, 2024×2
- (PHOTO) ISPRS Journal of Photogrammetry and Remote Sensing, 2025×1
- (T-CDS) IEEE Transaction on Cognitive and Developmental Systems, 2025×1
- (T-Mech) IEEE/ASME Transactions on Mechatronics, 2020×1, 2021×2, 2025×2
- (T-SMC) IEEE Transactions on Systems, Man and Cybernetics: Systems, 2025×1
- (RA-L) IEEE Robotics and Automation Letters, 2021×2, 2022×9, 2023×4, 2024×1
- (T-CSVT) IEEE Transactions on Circuits and Systems for Video Technology, 2025×1
- (ITSC) IEEE International Conference on Intelligent Transportation Systems, 2022×1
- (T-ASE) IEEE Transactions on Automation Science and Engineering, 2024×1, 2025×4
- (T-ITS) IEEE Transactions on Intelligent Transportation Systems, 2019×1, 2020×4, 2024×1, 2025×1
- (IROS) IEEE/RSJ International Conference on Intelligent Robots and Systems, 2021×2, 2022×5, 2023×2, 2024×1, 2025×2

UNIVERSITY SERVICE

- MPhil Thesis exam committee
Xuanhong LIAO (ECE, HKUST, 2022), Xinyuan XU (IIMP, HKUST, 2023), Wenyu WANG (IIMP, HKUST, 2023), Manhao SITU (IIMP, HKUST, 2023), Guang CAI (IIMP, HKUST, 2023), Qiucan HUANG (IIMP, HKUST, 2024), Qiucan HUANG (IIMP, HKUST, 2024), Juhao SU (IIMP, HKUST, 2024), Guangzhen LIN (IIMP, HKUST, 2024), Haoqian LIU (IIMP, HKUST, 2024), Haozhen LI (IIMP, HKUST, 2024), Haoming HUANG (IIMP, HKUST, 2025), Peng WU (IIMP, HKUST, 2025), Yang Xu (IIMP, HKUST, 2025)
- HKUST 286th Technology Review Committee Meeting

RESEARCH GRANT

- PI, 2024 HKUST-BDR Joint Research Institute Research Project, Key Technologies for Coverage Task Using Indoor Mobile Manipulators, *Funded*

PUBLICATION

(Notations: ¹ for co-advised HKUST students; ² for collaborators and PIs; ³ for former PhD supervisors;  for corresponding author)

★ Selected Publications

- S.1 Zehuan Yu¹, Zhijian Qiao¹, Wenyi Liu, **Huan Yin** and Shaojie Shen²
SLIM: Scalable and Lightweight LiDAR Mapping in Urban Environments
IEEE Transactions on Robotics (T-RO), 2025. ([pdf](#)) ([video](#)) ([code](#))
- S.2 Yang Xu¹, Qiucan Huang¹, Shaojie Shen² and **Huan Yin**
Incorporating Point Uncertainty in Radar SLAM
IEEE Robotics and Automation Letters (RA-L), 2025. ([pdf](#)) ([code](#))
- S.3 **Huan Yin**, Xuecheng Xu, Sha Lu, Xieyuanli Chen², Rong Xiong³, Shaojie Shen², Cyrill Stachniss² and Yue Wang^{3}
A Survey on Global LiDAR Localization: Challenges, Advances and Open Problems
International Journal of Computer Vision (IJCV), 2024. ([pdf](#))
- S.4 **Huan Yin**, Zhiyi Lin² and Justin Yeoh^{2}
Semantic localization on BIM-generated maps using a 3D LiDAR sensor
Automation in Construction (AutCon), 2023. ([pdf](#)) ([video](#))
- S.5 **Huan Yin**, Yue Wang^{3}, Runjian Chen and Rong Xiong^{3}
RaLL: End-to-end Radar Localization on Lidar Map Using Differentiable Measurement Model
IEEE Transactions on Intelligent Transportation Systems (T-ITS), 2021. ([pdf](#)) ([video](#)) ([code](#))

Journal Papers

- J.1 Zehuan Yu¹, Zhijian Qiao¹, Wenyi Liu, **Huan Yin** and Shaojie Shen²
SLIM: Scalable and Lightweight LiDAR Mapping in Urban Environments
IEEE Transactions on Robotics (T-RO), 2025. ([pdf](#)) ([video](#)) ([code](#))
- J.2 Wugang Meng¹, Tianfu Wu, **Huan Yin** and Fumin Zhang²
NuRF: Nudging the Particle Filter in Radiance Fields for Robot Visual Localization
IEEE Transaction on Cognitive and Developmental Systems (T-CDS), 2025. ([pdf](#))
- J.3 Zhijian Qiao¹, Haoming Huang¹, Chuhao Liu, Zehuan Yu¹, Shaojie Shen², Fumin Zhang² and **Huan Yin**
Speak the Same Language: Global LiDAR Registration on BIM Using Pose Hough Transform
IEEE Transactions on Automation Science and Engineering (T-ASE), 2025. ([pdf](#)) ([video](#)) ([code](#))
- J.4 Yang Xu¹, Qiucan Huang¹, Shaojie Shen² and **Huan Yin**
Incorporating Point Uncertainty in Radar SLAM
IEEE Robotics and Automation Letters (RA-L), 2025. ([pdf](#)) ([code](#))
- J.5 Zhijian Qiao¹, Zehuan Yu¹, Binqian Jiang, **Huan Yin** and Shaojie Shen²
G3Reg: Pyramid Graph-based Global Registration using Gaussian Ellipsoid Model
IEEE Transactions on Automation Science and Engineering (T-ASE), 2024. ([pdf](#)) ([code](#)) ([benchmark](#))
- J.6 Weixin Ma², **Huan Yin**, Patricia Wong, Danwei Wang, Yuxiang Sun and Zhongqing Su
TripletLoc: One-Shot Global Localization using Semantic Triplet in Urban Environments
IEEE Robotics and Automation Letters (RA-L), 2024. ([pdf](#))
- J.7 Weixin Ma², **Huan Yin**, Lei Yao, Yuxiang Sun and Zhongqing Su
Evaluation of Range Sensing-based Place Recognition for Long-term Urban Localization
IEEE Transactions on Intelligent Vehicles (T-IV), 2024. ([pdf](#)) ([project](#))
- J.8 **Huan Yin**, Xuecheng Xu, Sha Lu, Xieyuanli Chen², Rong Xiong³, Shaojie Shen², Cyrill Stachniss² and Yue Wang^{3}
A Survey on Global LiDAR Localization: Challenges, Advances and Open Problems
International Journal of Computer Vision (IJCV), 2024. ([pdf](#))
- J.9 **Huan Yin**, Zhiyi Lin² and Justin Yeoh^{2}
Semantic localization on BIM-generated maps using a 3D LiDAR sensor
Automation in Construction (AutCon), 2023. ([pdf](#)) ([video](#))

- J.10 **Huan Yin**, Yue Wang^{3✉}, Jun Wu and Rong Xiong³
Radar style transfer for metric robot localisation on lidar maps
CAAI Transactions on Intelligence Technology (TRIT), 2022. ([pdf](#)) ([video](#))
- J.11 Shuo Sun², Zhiyang Liu², **Huan Yin** and Marcelo Ang^{2✉}
FISS Planner: A General Trajectory Planning Framework using Fast Iterative Search and Sampling Strategy for Autonomous Driving
IEEE Robotics and Automation Letters (RA-L), 2022. ([pdf](#)) ([video](#))
- J.12 Zhiyi Lin², Chunyue Song^{2✉}, Jun Zhao and **Huan Yin**
Improved Approximate Dynamic Programming for Real-Time Economic Dispatch of Integrated Microgrids
Energy, Elsevier, 2022. ([pdf](#)) ([code](#))
- J.13 **Huan Yin**, Xuecheng Xu, Yue Wang^{3✉} and Rong Xiong³
Radar-to-Lidar: Heterogeneous Place Recognition via Joint Learning
Frontiers in Robotics and AI (FRAI), 2021. ([pdf](#)) ([code](#))
Most Cited in Field Robotics Section
- J.14 **Huan Yin**, Yue Wang^{3✉}, Runjian Chen and Rong Xiong^{3✉}
RaLL: End-to-end Radar Localization on Lidar Map Using Differentiable Measurement Model
IEEE Transactions on Intelligent Transportation Systems (T-ITS), 2021. ([pdf](#)) ([video](#)) ([code](#))
- J.15 Xuecheng Xu, **Huan Yin**, Zexi Chen, Yuehua Li, Yue Wang^{3✉} and Rong Xiong³
DiSCO: Differentiable Scan Context with Orientation
IEEE Robotics and Automation Letters (RA-L), 2021. ([pdf](#)) ([code](#))
- J.16 Runjian Chen, **Huan Yin**, Yanmei Jiao, Gamini Dissanayake, Yue Wang^{3✉}, and Rong Xiong³
Deep Samplable Observation Model for Global Localization and Kidnapping
IEEE Robotics and Automation Letters (RA-L), 2021. ([pdf](#)) ([code](#))
- J.17 **Huan Yin**, Yue Wang^{3✉}, Li Tang, Xiaqing Ding, Shoudong Huang² and Rong Xiong³
3D LiDAR Map Compression for Efficient Localization on Resource Constrained Vehicles
IEEE Transactions on Intelligent Transportation Systems (T-ITS), 2020. ([pdf](#)) ([video](#)) ([code](#))
- J.18 **Huan Yin**, Yue Wang^{3✉}, Xiaqing Ding, Li Tang, Shoudong Huang² and Rong Xiong³
3D LiDAR-Based Global Localization Using Siamese Neural Network
IEEE Transactions on Intelligent Transportation Systems (T-ITS), 2019. ([pdf](#)) ([video](#)) ([code](#))
- J.19 Xiaqing Ding, Yue Wang^{3✉}, Rong Xiong³, Dongxuan Li, Li Tang, **Huan Yin** and Liang Zhao
Persistent Stereo Visual Localization on Cross-Modal Invariant Map
IEEE Transactions on Intelligent Transportation Systems (T-ITS), 2019. ([pdf](#))
- J.20 Li Tang, Yue Wang^{3✉}, Xiaqing Ding, **Huan Yin**, Rong Xiong³ and Shoudong Huang²
Topological local-metric framework for mobile robots navigation: a long term perspective
Autonomous Robots (AURO), 2019. ([pdf](#)) ([data](#))

Conference Papers

- C.1 Bingbing Zhang¹, **Huan Yin**, Shuo Liu[✉], Fumin Zhang² and Wen Xu
VIMS: A Visual-Inertial-Magnetic-Sonar SLAM System in Underwater Environments
IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), 2025. ([pdf](#))
- C.2 Haoming Huang¹, Zhijian Qiao¹, Zehuan Yu¹, Chuhao Liu, Shaojie Shen², Fumin Zhang², **Huan Yin**[✉]
SLABIM: A SLAM-BIM Coupled Dataset in HKUST Main Building
2025 IEEE International Conference on Robotics and Automation (ICRA), 2025. ([pdf](#)) ([video](#)) ([code](#))
- C.3 Wugang Meng¹, Tianfu Wu, **Huan Yin** and Fumin Zhang^{2✉}
BEINGS: Bayesian Embodied Image-goal Navigation with Gaussian Splatting
2025 IEEE International Conference on Robotics and Automation (ICRA), 2025. ([pdf](#)) ([project](#))
- C.4 Jinzhi Cai¹, Scott Mayberry, **Huan Yin** and Fumin Zhang^{2✉}
A Data-Driven Velocity Estimator for Autonomous Underwater Vehicles Experiencing Unmeasurable Flow and Wave Disturbance
2025 IEEE International Conference on Robotics and Automation (ICRA), 2025.
- C.5 Qiucan Huang¹, Yuchen Liang, Zhijian Qiao¹, Shaojie Shen² and **Huan Yin**[✉]
Less is More: Physical-Enhanced Radar-Inertial Odometry
IEEE International Conference on Robotics and Automation (ICRA), 2024. ([pdf](#)) ([video](#)) ([code](#))

- C.6 Huibo Zhang¹, Shengkang Chen, **Huan Yin**² and Fumin Zhang²
 An In-Context Learning Approach for LLM-enabled Multi-Robot Task Allocation
2024 IEEE International Conference on Robotics and Biomimetics (ROBIO), 2024. ([pdf](#))
- C.7 Haozhe Wang², Zhiyang Liu, Lei Zhou, **Huan Yin** and Marcelo Ang²
 PEGG-Net: Pixel-Wise Efficient Grasp Generation in Complex Scenes
2024 IEEE International Conference on Cybernetics and Intelligent Systems (CIS) and IEEE International Conference on Robotics, Automation and Mechatronics (RAM) (CIS-RAM 2024) ([pdf](#))
- C.8 Zhijian Qiao¹, Zehuan Yu¹, **Huan Yin**² and Shaojie Shen²
 Online Monocular Lane Mapping Using Catmull-Rom Spline
IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), 2023. ([pdf](#)) ([video](#)) ([code](#))
- C.9 Zhijian Qiao¹, Zehuan Yu¹, **Huan Yin**² and Shaojie Shen²
 Pyramid Semantic Graph-based Global Point Cloud Registration with Low Overlap
IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), 2023. ([pdf](#)) ([video](#)) ([code](#))
- C.10 Zehuan Yu¹, Zhijian Qiao¹, **Huan Yin**² and Shaojie Shen²
 Multi-Session, Localization-oriented and Lightweight LiDAR Mapping Using Semantic Lines and Planes
IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), 2023. ([pdf](#)) ([video](#))
- C.11 Sheng Hong, Chunran Zheng, **Huan Yin**² and Shaojie Shen²
 Rollvox: Real-time and High-quality LiDAR Colorization with Rolling Shutter Camera
IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), 2023. ([pdf](#))
- C.12 Yifan Chen, Shuo Sun, **Huan Yin** and Marcelo Ang²
 Exploring the Effect of 3D Object Removal using deep learning for LiDAR-based Mapping and Long-term Vehicular Localization
IEEE International Conference on Intelligent Transportation Systems (ITSC), 2022. ([pdf](#))
- C.13 Sha Lu, Xuecheng Xu, **Huan Yin**, Yue Wang³ and Rong Xiong³
 One RING to Rule Them All: Radon Sinogram for Place Recognition, Orientation and Translation Estimation
IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), 2022. ([pdf](#))
- C.14 **Huan Yin**, Jia Min Liew, Lee Wai Leong, Marcelo Ang² and Justin Yeoh²
 Towards BIM-based robot localization: a real-world case study
International Symposium on Automation and Robotics in Construction (ISARC), 2022. ([pdf](#))
- C.15 Hongxiang Yu, Dashun Guo, **Huan Yin**, Anzhe Chen, Kechun Xu, Zexi Chen, Minhang Wang, Qimeng Tan, Yue Wang³ and Rong Xiong³
 Neural Motion Prediction for In-flight Uneven Object Catching
IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), 2021. ([pdf](#)) ([video](#))
- C.16 Zhiyi Lin², Chunyue Song², Jun Zhao, C. Yang and **Huan Yin**
 Economic Dispatch of an Integrated Microgrid Based on the Dynamic Process of CCGT Plant
Chinese Control and Decision Conference (CCDC), 2021. ([pdf](#))
Zhang Si-Ying Outstanding Youth Paper
- C.17 **Huan Yin**, Yue Wang³, Li Tang and Rong Xiong³
 Radar-on-Lidar: metric radar localization on prior lidar maps
IEEE International Conference on Real-time Computing and Robotics (RCAR), 2020. ([pdf](#)) ([video](#))
Best Conference Paper
- C.18 **Huan Yin**, Li Tang, Xiaqing Ding, Yue Wang³ and Rong Xiong³
 A failure detection method for 3D LiDAR based localization
Chinese Automation Congress (CAC), 2019. ([pdf](#))
- C.19 Xuanmeng Zhang, Yang Li, **Huan Yin** and Rong Xiong³
 3D LiDAR Map Compression Using Deep Neural Network
IEEE International Conference on Robotics and Biomimetics (ROBIO), 2019. ([pdf](#))
- C.20 Xiaqing Ding, Yue Wang³, Li Tang, **Huan Yin** and Rong Xiong³
 Communication constrained cloud-based long-term visual localization in real time
IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), 2019. ([pdf](#))

- C.21 Xiaqing Ding, Yue Wang^{3✉}, Dongxuan Li, Li Tang, **Huan Yin** and Rong Xiong^{3✉}
Laser map aided visual inertial localization in changing environment
IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), 2018. ([pdf](#))
- C.22 **Huan Yin**, Li Tang, Xiaqing Ding, Yue Wang^{3✉} and Rong Xiong³
LocNet: Global localization in 3D point clouds for mobile vehicles
IEEE Intelligent Vehicles Symposium (IV), 2018. ([pdf](#)) ([code](#))
- C.23 **Huan Yin**, Xiaqing Ding, Li Tang, Yue Wang^{3✉} and Rong Xiong^{3✉}
Efficient 3D LIDAR based loop closing using deep neural network
IEEE International Conference on Robotics and Biomimetics (ROBIO), 2017. ([pdf](#))
- C.24 Xiaqing Ding, Yue Wang^{3✉}, **Huan Yin**, Li Tang and Rong Xiong^{3✉}
Multi-session Map Construction in Outdoor Dynamic Environment
IEEE International Conference on Real-time Computing and Robotics (RCAR), 2018. ([pdf](#))
- C.25 Li Tang, Xiaqing Ding, **Huan Yin**, Yue Wang^{3✉} and Rong Xiong^{3✉}
From one to many: Unsupervised traversable area segmentation in off-road environment
IEEE International Conference on Robotics and Biomimetics (ROBIO), 2017. ([pdf](#)) ([video](#))

Non-refereed & Workshop Papers

- N.1 Yang Xu¹, Qiucan Huang¹, Shaojie Shen² and **Huan Yin**
Modeling Point Uncertainty in Radar SLAM
ICRA Workshop on Radar in Robotics, 2024.
Best Poster Award
- N.2 Haoming Huang¹, Zhijian Qiao¹, Zehuan Yu¹, Shaojie Shen² and **Huan Yin**
Lidar2BIM: Global Lidar Registration on BIM Leveraging Pose Hough Transform
ICRA Workshop on Future of Construction, 2024.
- N.3 **Huan Yin**, Yue Wang³ and Rong Xiong³
Improved Radar Localization on Lidar Maps Using Shared Embedding
ICRA Workshop on Radar Perception for All-Weather Autonomy, 2021. ([pdf](#))
Spotlight Talk
- N.4 **Huan Yin**, Dongdong Yu, Wenxing Mei, and Rong Xiong³
ZJUDancer Team Description Paper
International RoboCup Federation. Humanoid robot development, 2016. ([pdf](#)) ([video](#))

As of 10/2025