

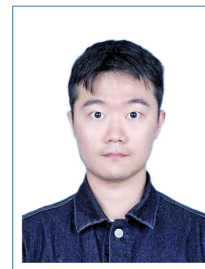
# Hanjing YE

## Curriculum Vitae

Department of Electrical and Electronic Engineering  
Southern University of Science and Technology

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📁 My Webpage



### Education

- 2022–present **PhD student, Electrical and Electronic Engineering**, Southern University of Science and Technology (SUSTech), Shenzhen.
- 2020–2022 : **Visiting student, Electrical and Electronic Engineering**, SUSTech, Shenzhen.
- 2019–2021 : **Master of Engineering, Mechanical and Electrical Engineering**, Guangdong University of Technology (GDUT), Guangzhou.
- 2015–2019 : **Bachelor of Engineering, Mechanical and Electrical Engineering**, GDUT, Guangzhou.

### Publications

† indicates equal contribution, and \* indicates corresponding authorship.

#### Conference Proceedings

- 2023 **Hanjing Ye**, Jieting Zhao, Yaling Pan, Weinan Chen, Li He and Hong Zhang\*, Robot Person Following Under Partial Occlusion, *2023 IEEE International Conference on Robotics and Automation (ICRA)* – Published.
- 2023 Zhilong Tang, **Hanjing Ye**, and Hong Zhang\*, Multi-scale Point Octree Encoding Network for Point Cloud based Place Recognition, Submitted to *2023 IEEE International Conference on Intelligent Robots and Systems (IROS)* – Published.
- 2022 Weinan Chen†, **Hanjing Ye**†, Lei Zhu, Chao Tang, Changfei Fu and Hong Zhang\*, Keyframe Selection with Information Occupancy Grid Model for Long-term Data Association, In *2022 IEEE International Conference on Intelligent Robots and Systems (IROS)* – Published.
- 2021 **Hanjing Ye**, Guangcheng Chen, Weinan Chen, Li He, Yisheng Guan and Hong Zhang\*, Mapping While Following: 2D LiDAR SLAM in Indoor Dynamic Environments with a Person Tracker, In *2021 IEEE International Conference on Robotics and Biomimetics (ROBIO)* – Published.

#### Journal Articles

- 2023 **Hanjing Ye**, Jieting Zhao, Yu Zhan, Weinan Chen, Li He and Hong Zhang\*, Person Re-Identification for Robot Person Following with Online Continual Learning, Submitted to *IEEE Robotics and Automation Letters* – Under review.
- 2023 **Hanjing Ye**†, Weinan Chen†, Jingwen Yu, Li He, Yisheng Guan and Hong Zhang\*, Condition-Invariant and Compact Visual Place Description by Convolutional Autoencoder, *ROBOTICA* – Published.

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## Research Experience

### Shenzhen Key Laboratory of Robotics and Computer Vision, SUSTech

2021–present **Robot Person Following.**

- Developing a natural following method considering collision avoidance and social awareness.
- Proposed a life-long person identification module which could keep identifying the master even under severe domain-drift condition with online continual learning.
- Proposed a vision-based robot person following system which endows the mobile robot with an ability of following the master even under partial occlusion based on a novel hybrid location approach.
- Proposed a robot-person-following-assisted 2D LiDAR SLAM system that is able to simplify the mapping procedure and mitigate the influence of dynamic objects.

Advisor : **Dr. Hong Zhang**, *Chair Professor, Department of Electronic and Electrical Engineering, SUSTech*; Professor Emeritus, University of Alberta

### Shenzhen Key Laboratory of Robotics and Computer Vision, SUSTech & Biomimetic and Intelligent Robotics Laboratory, GDUT

2019–2021 **Visual Place Recognition.**

- Proposed a keyframe selection strategy with information occupancy grid model for long-term data association by utilizing explainable deep-learning-based descriptor and information gain theory.
- Proposed a condition-invariant and compact visual place description for visual place recognition by distilling the high-level representation with a convolutional-autoencoder-based reconstruction procedure.

Advisor : **Dr. Hong Zhang**, *Chair Professor, Department of Electronic and Electrical Engineering, SUSTech*; Professor Emeritus, University of Alberta

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## Teaching Assistant

Fall, 2021: **EE5346: Autonomous Robot Navigation**, SUSTech.

Spring, 2021: **EE346: Mobile Robot Navigation and Control**, SUSTech.