

ZHIJIE YANG

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EDUCATION

Technical University of Munich M.Sc. in Computer Science (Informatik) Department of Informatics (Fakultät für Informatik)	October 2020 - Present
ShanghaiTech University B.Eng. in Computer Science and Technology School of Information Science and Technology	August 2017 - July 2020 GPA: 3.18
ShanghaiTech University B.S. in Bioscience School of Life Science and Technology	August 2016 - July 2017

RESEARCH PROJECTS

Towards Generation and Evaluation of Comprehensive Mapping Robot Datasets

This project consists of building an autonomous robot system with various heterogeneous sensors to precept the surroundings and generating datasets for SLAM algorithm benchmarks and experiments. Advisor: Prof. Sören Schwertfeger ⁱ. [1][2]

Mapping with Reflection – Detection and Utilization of Reflection in 3D Lidar Scans

This project aimed at detecting the reflecting surfaces with 3D Lidar and used it to map the backside of objects. Advisor: Prof. Sören Schwertfeger ⁱ. [3]

TECHNICAL STRENGTHS

Modeling and Analysis: SOLIDWORKS

Programming Languages: C, C++, Python, MATLAB, RISC-V and Heidenhain

Systems: Robot Operating System (ROS) and Linux

WORK EXPERIENCE

School of Information Science and Technology

Research assistant August 2020 - January 2021

Teaching assistant for Computer Architecture I January 2019 - June 2019

Teaching assistant for Operating System I September 2019 - January 2020

Teaching assistant for Intro. to Information Science and Technology B February 2020 - July 2020

Stereeye Co., Ltd.

Internship as R&D engineer. April 2019 - January 2021

SenseTime

Autonomous driving system research intern. March 2021 - September 2021

Shanghai AI Lab

Computer vision research intern. September 2021 - Present

ⁱ<https://robotics.shanghaitech.edu.cn/people/soeren>

AWARDS

RoboCup Rescue China

- The third prize. April 2018
- The first prize. April 2019

Robomaster

- The third prize of China Central Regional. May 2018
- The second prize of China Northern Regional. June 2019

Challenge Cup Shanghai Final

- The first prize. May 2019

Merit Student of Academic Year 2017-2018

November 2018

Merit Student of Academic Year 2018-2019

November 2019

SERVICES

2015 Shanghai Sister Cities Youth Camp Volunteer

July 2015

2019 Shanghai Sister Cities Youth Camp Volunteer Director

July 2019

Shanghai Metro Volunteer

Since September 2014

- more than 400 hours service time.

LANGUAGES

Chinese Mandarin

Native Speaker

English

Proficient Speaker

- TOEFL: 102, Reading 27, Listening 28, Speaking 23, Writing 24

as of June 2019

- GRE: 322, Verbal 155, Quantitative 167, Writing 3.5

as of November 2019

German

Beginner

Publications

- [1] Hongyu Chen et al. “Advanced mapping robot and high-resolution dataset”. In: *Robotics and Autonomous Systems* (2020), p. 103559. ISSN: 0921-8890. DOI: <https://doi.org/10.1016/j.robot.2020.103559>. URL: <http://www.sciencedirect.com/science/article/pii/S0921889020303997>.
- [2] Hongyu Chen et al. *Towards Generation and Evaluation of Comprehensive Mapping Robot Datasets*. In Workshop on Dataset Generation and Benchmarking of SLAM Algorithms for Robotics and VR/AR, 2019 IEEE International Conference on Robotics and Automation (ICRA). 2019. arXiv: [1905.09483](https://arxiv.org/abs/1905.09483) [cs.R0]. URL: <https://arxiv.org/abs/1905.09483>.
- [3] Xiting Zhao, Zhijie Yang, and Sören Schwertfeger. “Mapping with Reflection - Detection and Utilization of Reflection in 3D Lidar Scans”. In: *2020 IEEE International Symposium on Safety, Security, and Rescue Robotics (SSRR)*. 2020, pp. 27–33. DOI: [10.1109/SSRR50563.2020.9292595](https://doi.org/10.1109/SSRR50563.2020.9292595).