

芦莎

□ (+86) 19550211136 · ✉ lusha@zju.edu.cn · GitHub@lus6-Jenny · GoogleScholar@Sha Lu

教育背景

浙江大学，控制科学与工程，硕博连读

2021.9 - 至今

浙江大学机器人实验室（工业控制技术国家重点实验室），导师：熊蓉教授，王越教授

荣誉奖项：浙江大学优秀研究生、浙江大学“控制之旅”夏令营特别优秀营员

重庆大学，机械设计制造及其自动化，工学学士

2016.9 - 2021.6

英语成绩：CET-4 565, CET-6 563, TOEFL 92, 全英文授课，具备良好的英语听说读写能力

荣誉奖项：国家奖学金、优秀学生综合奖学金甲等、优秀学生、优秀毕业生、优秀学生干部等

项目经历

自主无人系统的开放通用高端智能控制器

科技创新 2030 重大项目

多机器人协同感知与 XXXX 关键技术研究

教育部联合基金课题

多机协同 XXXXX

智元院项目

多机协同编队控制研发

航天二院项目

多机器人协同探索

科技委项目

论文发表

RING#: PR-by-PE Global Localization with Roto-translation Equivariant Gram Learning

Sha Lu, Xuecheng Xu, Dongkun Zhang, Haojian Lu, Xieyanli Chen, Rong Xiong, Yue Wang. IEEE Transactions on Robotics (TRO), 2025.

BEV-DWPVO: BEV-based Differentiable Weighted Procrustes for Low Scale-drift Monocular Visual Odometry on Ground

Yufei Wei, Sha Lu, Wangtao Lu, Rong Xiong, Yue Wang. IEEE Robotics and Automation Letters (RAL), 2025.

PEP: Policy-Embedded Trajectory Planning for Autonomous Driving

Dongkun Zhang, Jiaming Liang, Sha Lu, Ke Guo, Qi Wang, Rong Xiong, Zhenwei Miao, Yue Wang. IEEE Robotics and Automation Letters (RAL), 2024.

BEV-ODOM: Reducing Scale Drift in Monocular Visual Odometry with BEV Representation

Yufei Wei, Sha Lu, Fuzhang Han, Rong Xiong, Yue Wang. IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), 2024.

RGBD-based Image Goal Navigation with Pose Drift: A Topo-metric Graph based Approach

Shuhao Ye, Yuxiang Cui, Hao Sha, Sha Lu, Yu Zhang, Rong Xiong, Yue Wang. IEEE International Conference on Robotics and Automation (ICRA), 2024.

A survey on global lidar localization: Challenges, advances and open problems

Huan Yin, Xuecheng Xu, Sha Lu, Xieyanli Chen, Rong Xiong, Shaojie Shen, Cyrill Stachniss, Yue Wang. International Journal of Computer Vision (IJCV), 2024.

Recurrent Volume-based 3D Feature Fusion for Real-time Multi-view Object Pose Estimation

Jun Wu, Xiangyu Ru, Sha Lu, Rong Xiong, Yue Wang. IEEE Transactions on Intelligent Manufacturing (TIM), 2023.

RING++: Roto-translation Invariant Gram for Global Localization on a Sparse Scan Map

Xuecheng Xu, Sha Lu (共同一作), Jun Wu, Haojian Lu, Qiuguo Zhu, Yiyi Liao, Rong Xiong, Yue Wang. IEEE Transactions on Robotics (TRO), 2023.

DeepRING: Learning Roto-translation Invariant Representation for LiDAR based Place Recognition

Sha Lu, Xuecheng Xu, Li Tang, Rong Xiong, Yue Wang. IEEE International Conference on Robotics and Automation (ICRA), 2023.

One RING to Rule Them All: Radon Sinogram for Place Recognition, Orientation and Translation Estimation

Sha Lu, Xuecheng Xu, Huan Yin, Zexi Chen, Rong Xiong, Yue Wang. IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), 2022.

Translation invariant global estimation of heading angle using sinogram of lidar point cloud

Xiaqing Ding, Xuecheng Xu, Sha Lu, Yanmei Jiao, Mengwen Tan, Rong Xiong, Huanjun Deng, Mingyang Li, Yue Wang. IEEE International Conference on Robotics and Automation (ICRA), 2022.

专利软著

基于鸟瞰图特征的通用直接全局定位方法、系统及设备

国家发明专利，学生一作，已授权

基于激光雷达的移动机器人高效鲁棒全局定位方法

国家发明专利，学生一作，已实质审查

一种基于激光雷达可估位姿的移动机器人位置重识别方法

国家发明专利，学生二作，已授权

多机器人集中式实时定位建图系统

计算机软件著作权，学生二作，已授权