

LINGHAO YANG

☎ +8615087714890 ✉ linghaoyangneu@163.com 🌐 <https://linghao-yang.github.io/>

Education

Northeastern University (NEU)

MSc Eng in Control Science and Engineering

Main Areas: Multi-sensor fusion SLAM and Scene semantic modelling

Northeastern University (NEU)

BSc Eng in Automation

GPA: 4.0103/5

Sep 2021 – June 2024

Shenyang, China

Sep 2016 – June 2020

Shenyang, China

Ranking: 17/256

Publications

- [1] **Yang L**, Zhang Y, Tian R, Liang S, Shen Y, Coleman S, Kerr D. Fast, Robust, Accurate, Multi-Body Motion Aware SLAM. *IEEE Transactions on Intelligent Transportation Systems (T-ITS)*, 2023.
[PDF] [Poster]
- [2] **Yang L**, Wu Y, Deng Y, Tian R, Hu X, Ma T. UniQuadric: A SLAM Backend for Unknown Rigid Object 3D Tracking and Light-Weight Modeling. *IEEE Transactions on Intelligent Transportation Systems (T-ITS Under review)*, 2023.
[PDF] [Poster]
- [3] Tian R, Zhang Y, Cao Z, Jin Z, **Yang L**, Coleman S, Kerr D. Object SLAM With Robust Quadric Initialization and Mapping for Dynamic Outdoors. *IEEE Transactions on Intelligent Transportation Systems (T-ITS)*, 2023.
[PDF]
- [4] Liang S, Zhang Y, Tian R, Zhu D, **Yang L**, Cao Z. SemLoc: Accurate and Robust Visual Localization with Semantic and Structural Constraints from Prior Maps. *International Conference on Robotics and Automation (ICRA)*, 2022.
[PDF]
- [5] Tian R, Zhang Y, Feng Y, **Yang L**, Cao Z, Coleman S, Kerr D. Accurate and robust object SLAM with 3D quadric landmark reconstruction in outdoors. *IEEE Robotics and Automation Letters (RAL)*, 2021.
[PDF]
- [6] Shen Y, Zhang Y, Wu Y, Wang Z, **Yang L**, Coleman S, Kerr D. BSH-Det3D: Improving 3D Object Detection with BEV Shape Heatmap. *International Conference on Intelligent Robots and Systems (IROS)*, 2023.
[PDF]

Public Projects

- Off-road environment SLAM: Responsible for the development of a purely visual localization system based on a priori LiDAR point cloud maps. Sep 2020
- Park Autonomous Parking: Responsible for the development of multi-sensor fusion odometry and road-level semantic mapping system. Sep 2021 - Sep 2022

Work Experience

Xi'an Precision Machinery Research Institute Kunming Branch, China

Unmanned Underwater Vehicles Control & Navigation

July 2023 – Present

Algorithm Engineer

DJI

LVIO & 3D Reconstruction

Jan 2022 – May 2022

Algorithm Intern

Awards

- Northeastern University President's Scholarship. Sep 2020
- Northeastern University Graduate Student First Class Academic Scholarship Sep 2020 - Sep 2023
- Northeastern University Outstanding Student Scholarship. Sep 2016 - Sep 2020

Self evaluation

- I am a good learner, listener and collaborator. I hold the belief that the journey of a thousand miles begins with a single step.