Xiangyu Liu

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EDUCATION

Nanyang Technological University, Singapore

• M.Sc.. in Computer Control and Automation

Aug 2018 - Jun 2019

- Dissertation: Quantitative Trajectory Evaluation Criterion and Long-term Enhancement for Multi-Robot SLAM
- Adviser: Prof. Danwei Wang
- Focus: Multi-Robot SLAM, Computer Vision.
- Cumulative GPA: 3.88 / 5.0

University of Electronic Science and Technology of China, Chengdu, Sichuan, P.R.China

■ B.Mgt. in Electronic Commerce

Sep 2014 – Jun 2018

- B.Eng. in Electronic Engineering
 - Dissertation: Research on Organizational Attraction of JD.COM in the era of Smart Logistics
 - Guaranteed Postgraduate Qualification,
 - Cumulative GPA: 3.47 / 4.00

SKILLS

- Excellent in C/C++; Skilled in Python.
- Excellent in Linux, ROS, Matlab, experienced in Qt
- Excellent in computer vision, SLAM theory, programming with popular CV libraries like OpenCV.
- Good understanding in neural network, course-attending in control theory, control network, etc.
- Sufficient hands-on experience in robot development.

AWARDS & SCHOLARSHIPS

National First Award, in National University Electronics Design Contest, MoE China
 For contest project: panel-ball controlling device

National Champion, in RoboMasters National University Robot Contest, MoE China & DJI

Oct 2015 – Aug 2016

For contest project: RM series robots.

■ National Bronze Award, in JD X Robot Challenge Contest, JD.COM

Apr 2017

For contest project: Automatic Sorting Robot

Awards and Scholarships, in several other minor university contests held in UESTC

Sep 2014 – Jun 2018

Guaranteed Postgraduate Qualification, in UESTC

Sep 2017

PROJECTS

Robotics ADVANCe Laboratory, NTU

Master Dissertation

Oct 2018 – Apr 2019

· Project: Place Recognition and Localization for Multi-Robot SLAM

For cumulative outstanding performance in national and provincial contests

- Supervisors: Prof. Danwei Wang
- Focus: SLAM, Multi-Robot SLAM, Computer Vision

RoboMasters Contest Lab, UESTC

RoboMasters Contest Robot Design

Oct 2015 – Aug 2016

- Project: UAV for RM Contest
- Supervisors: Prof. Liping HE
- Focus: Robot Contest, Computer Vision, Target Recognization, Item Grabbing

JDX Robot Challenge

Jan 2017 – Apr 2017

- Project: Auto-sorting robot
- Supervisors: Prof. Liping HE
- Focus: Robot Contest, 3D Vision, Target Recognization, Item Grabbing

National University Electronic Design Contest

Aug 2017

- Project: Panel-ball Control Device
- Supervisors: Prof. Jiexiong Ding
- Focus: Robot Contest, Target Recognization, Control

JD.COM X Department, JD.COM

Internship, Embedded Algorithm Engineer

Sep 2017 – Dec 2017

- Project: Auto-Warehouse AGV
- Work: Joined the R&D group of auto-warehouse AGVs, help to design and debug the AGV algorithms for smart logistic application.
- · Focus: Smart Logistics, AGV.

WORK EXPERIENCE

Zhejiang University, Hangzhou, China

- Research Assistant, State Key Lab of CAD&CG, College of Computer Science Jun 2020 Present
 - CAD&CG: Computer Aided Design and Computer Graphics
 - Project: Multi Robot Collaborative SLAM
 - Supervisors: Prof. Guofeng Zhang

CAMPUS ACTIVITIES

Work-Zone of Innovation And Entrepreneurship, School of Management and Economics, UESTC

Chief Manager

Jul 2015 – Sep 2017

- Improved the talent-training concept and mechanism.
- Led the team to finish 11 university-level projects, and won over 10 prizes including 3 national and 1 provincial prizes.

Gymguys Training and Fitness Company, Branch in. Chicago, USA

Internship

Jul 2015 – Aug 2015

• Did marketing work as an assistant of the marketing director.

SMU Entrepreneurship Program, SMU, Singapore

■ Course Program

Jan 2016 – Feb 2016

- Attended SMU entrepreneurship courses, including innovation mind, entrepreneurship management, and team management, etc.
- Finished the business plan training program with the entrepreneurship idea of "THE LAST MILE", which was focusing
 on problems of O2O delivery.

LANGUAGES

- Chinese: Native language.
- English: Fluent (IELTS: 6.5(6)).

REFERENCES

Dr Danwei WANG, Professor

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■ Dr Liping HE, Professor

PhD, Professor, School of Mechatronics Engineering,

University of Electronic Science and Technology of China,

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PUBLICATIONS

- [1]X. Liu, J. Chen, S. Wu, X. Ren, and Z. Zhang. Technical report of auto-sorting robot in jdx robot challenge (only in chinese). Technical report, University of Eletronic Science and Technology of China, 10.13140/RG.2.2.24865.22881, 2017.
- [2]Xiangyu Liu. Research on organizational attraction of jd.com in the era of smart logistics (only in chinese). Bechalor Thesis, University of Eletronic Science and Technology of China, 10.13140/RG.2.2.34092.69760, 2018.
- [3]Xiangyu Liu. Quantitative trajectory evaluation criterion and long-term enhancement for multi-robot slam. Master's thesis, Nanyang Technological University Singapore, 10.13140/RG.2.2.14698.88002, 2019.