

Mike Xiangyu Liu

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EDUCATION

Nanyang Technological University(NTU), 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[3]
 - Adviser: Prof. Danwei Wang
 - Focus: Multi-Robot SLAM, Computer Vision.
 - Cumulative GPA: 3.88 / 5.0

University of Electronic Science and Technology of China(UESTC), 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 [2]
 - Recommended Postgraduate Qualification,
 - Cumulative GPA: 3.47 / 4.00

SKILLS

- Excellent in C/C++, Linux, ROS; Skilled in Python, Matlab.
- Excellent in robotics perception and navigation.
- Good understanding in neural network, course-attending in control theory, control network, etc.
- Abundant hands-on experience in robot development.

AWARDS & SCHOLARSHIPS

National First Award, in National University Electronics Design Contest(NUEDC), MoE China

- For contest project: panel-ball controlling device Aug 2017

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

- For contest project: RM series robots. Oct 2015 – Aug 2016

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

- For contest project: Automatic Sorting Robot Apr 2017

Awards and Scholarships, in several university-level contests held in UESTC

Sep 2014 – Jun 2018

Recommended Postgraduate Qualification, in UESTC

- For accumulated outstanding performance in national and provincial contests Sep 2017

PROJECTS

Computer Vision Group, State Key Lab of CAD&CG, Zhejiang University

- Research Assistant Jul 2020 – Apr 2021
 - Project: Multi Robot Localization, Reconstruction and Exploration
 - Supervisors: Prof. Guofeng Zhang
 - Focus: Multi-Robot SLAM, Cross-Robot Localization, Dense Reconstruction, Navigation

Robotics ADVANCE Laboratory, NTU

- Master Dissertation Oct 2018 – Apr 2019
 - Project: Place Recognition and Localization for Multi-Robot SLAM [3]
 - 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 Recognition, Item Grabbing
 - Patent: A UAV-mounted lightweight grabbing device

- JDX Robot Challenge [1] Jan 2017 – Apr 2017
 - Project: Auto-sorting robot
 - Supervisors: Prof. Liping He
 - Focus: Robot Contest, 3D Vision, Target Recognition, Item Grabbing

- National University Electronic Design Contest Aug 2017
 - Project: Panel-ball Control Device
 - Supervisors: Prof. Jiexiong Ding
 - Focus: Robot Contest, Target Recognition, Control

JD.COM X Department, JD.COM

	<ul style="list-style-type: none"> ▪ Internship, Embedded Algorithm Engineer Sep 2017 – Dec 2017 <ul style="list-style-type: none"> • Project: Auto-Warehouse AGV • Work: Joined the R&D group of auto-warehouse AGVs, help to design and debug AGVs for smart logistic application. • Focus: Smart Logistics, AGV.
WORK EXPERIENCE	<p>Nanyang Technological University, Singapore</p> <ul style="list-style-type: none"> ▪ Research Associate, Robotic Lab Jul 2021 – Now <ul style="list-style-type: none"> • Supervisor: Prof. Danwei Wang <p>Zhejiang University, Hangzhou, China</p> <ul style="list-style-type: none"> ▪ Research Assistant, State Key Lab of CAD&CG, College of Computer Science Jul 2020 – Apr 2021 <ul style="list-style-type: none"> • CAD&CG: Computer Aided Design and Computer Graphics • Project: Multi Robot Collaborative SLAM • Supervisors: Prof. Guofeng Zhang <p>Nanyang Technological University, Singapore</p> <ul style="list-style-type: none"> ▪ Research Associate, NTU-Siemens Cooperative Lab, ERIAN Aborted <ul style="list-style-type: none"> • Before the commence date of the job, my work pass application was rejected by MOM, due to the COVID-19 situation. And as a consequence, the job offer was withdrawn.
CAMPUS ACTIVITIES	<p>Work-Zone of Innovation And Entrepreneurship, School of Management and Economics, UESTC</p> <ul style="list-style-type: none"> ▪ Chief Manager Jul 2015 – Sep 2017 <ul style="list-style-type: none"> • 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. <p>Gymguys Training and Fitness Company, Chicago, USA</p> <ul style="list-style-type: none"> ▪ Internship Jul 2015 – Aug 2015 <ul style="list-style-type: none"> • Marketing work as an assistant of the marketing director. <p>SMU Entrepreneurship Program, Singapore Management University, Singapore</p> <ul style="list-style-type: none"> ▪ Course Program Jan 2016 – Feb 2016 <ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> ▪ Chinese: Native speaker. ▪ English: Fluent (IELTS: 6.5(6)).
REFERENCES	<ul style="list-style-type: none"> ▪ Dr Danwei WANG, Professor Division of Control and Instrumentation, School of Electrical and Electrical Engineering, Block S2 Nanyang Technological University, Nanyang Avenue, Singapore 639798 Office phone: (+65) 6790 5376 School fax: (+65) 6793 3318 E-mail: edwwang@ntu.edu.sg WWW: http://www.ntu.edu.sg/home/edwwang ▪ Dr Guofeng ZHANG, Professor Computer Vision Group, State Key Lab of CAD&CG East Building 1A-509, ZijinGang Campus, Zhejiang University Office phone: (+86) 571-88208701 School fax: (+86) 571-88206680 E-mail: zhangguofeng@cad.zju.edu.cn WWW: http://www.cad.zju.edu.cn/home/gfzhang ▪ Dr Liping HE, Professor PhD, Professor, School of Mechatronics Engineering, University of Electronic Science and Technology of China, Tel.: +86-18118010621 Email: lipinghe@uestc.edu.cn Address: No.2006, Xiyuan Ave, West Hi-tech Zone, 611731 Chengdu, Sichuan, P. R. China

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.
- [4]Xiangyu Liu, Weicai Ye, Chaoran Tian, Zhaopeng Cui, Hujun Bao, and Guofeng Zhang. Coxgraph: Multi-robot collaborative, globally consistent, online dense reconstruction system. In *IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*, 2021.
- [5]Yijie Qu, Xiangyu Liu, and JiaXiang Xu. Patent: A uav-mounted lightweight grabbing device. *Patent No. CN201710174508.7*, 2016.