Mike Xiangyu Liu

EMail: xiangyu002@e.ntu.edu.sg • Tel: +8619857155986 • WeChat: lxy13438107982

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 – Now

- Project: Multi Robot Localization, Reconstruction and Exploration
- · Supervisors: Prof. Guofeng Zhang
- $\bullet \;\; Focus: \; Multi-Robot\; SLAM,\; Cross-Robot\; Localization,\; Dense\; Reconstruction,\; Navigation$

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 Recognization, Item Grabbing

JDX Robot Challenge [1]

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 AGVs for smart logistic application.
- Focus: Smart Logistics, AGV.

WORK EXPERIENCE

Nanyang Technological University, Singapore

Research Associate, NTU-Siemens Cooperative Lab, ERIAN

Aborted

• 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.

Zhejiang University, Hangzhou, China

• Research Assistant, State Key Lab of CAD&CG, College of Computer Science

Jun 2020 - Now

- 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, Chicago, USA

Internship

Jul 2015 – Aug 2015

• Marketing work as an assistant of the marketing director.

SMU Entrepreneurship Program, Singapore Management University, 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 speaker.
- English: Fluent (IELTS: 6.5(6)).

REFERENCES

■ 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 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 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.