# 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 — Aug 2017
  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
  For cumulative outstanding performance in national and provincial contests

**PROJECTS**

**Robotics ADVANCe Laboratory**, NTU

- Master Dissertation — Oct 2018 – Apr 2019
  - Project: Place Recognition and Localization for Multi-Robot SLAM
  - 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.

**integrated Vision intelligent perception laboratory (iVip)**, Tsinghua University
- Remote internship                                                              May 2020 – Present
  - Project: multi-agent reinforcement learning application on formation control
  - Supervisors: A.P. Fei Qiao
  - Focus: multi-agent reinforcement learning, formation control

**OTHER WORK EXPERIENCE**

**Nanyang Technological University**, Singapore
- Research Associate, NTU-Siemens Cooperative Lab, ERIAN                          Aborted
  - Before the starting 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 – Present
  - CAD&CG: Computer Aided Design and Computer Graphics
  - 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**
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**PUBLICATIONS**