# Ruoxiang Li | Curriculum Vitae

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## RESEARCH INTEREST

Visual SLAM, Event-based SLAM, Robotics, Computer Vision

## **EDUCATION**

National University of Defense Technology (Non-military student)

Master of Engineering in Computer Science and Technology

Advisor: Prof. Dr. Dianxi Shi

Northeastern University

Bachelor of Engineering in Internet of Things

GPA: 3.6585 / 5 (Top 15%)

Changsha, China P.R.

Sept. 2017 - Present

Shenyang, China P.R.

Sept. 2013 - Jun. 2017

## **COMPETITION EXPERIENCE**

## ABU Robocon (Third Award, Best Design Award)

Jun. 2015

- Team Task: Independently design two robots cooperating to play badminton doubles with the robots of other teams.
- **Duties included:** Coordinate conversion, data acquisition and processing procedures based on Kinect for Windows v2 using C language, test the effect of illumination on Kinect depth camera.
- o Development Tools: Halcon, Microsoft Visual Studio

# Robot Competition for Undergraduates in Liaoning Province (First Award)

Oct. 2014

- **Team Task:** Independently design two robots cooperating to collect golf balls in the designated area and transport the collected balls to the starting position.
- **Duties included:** Robot control program design, control the robot to collect golf balls by fixed route based on LPC1700 series Cortex-M3 micro-controller and  $\mu$ C/OSII system (using C language).
- o Skills & devices included: CAN communication, Gyroscope, Encoder

## **PUBLICATIONS**

- Ruoxiang, Li and Dianxi, Shi and Yongjun, Zhang and Kaiyue, Li and Ruihao, Li, "FA-Harris: A
  Fast and Asynchronous Corner Detector for Event Cameras," IEEE/RSJ International Conference on
  Intelligent Robots and Systems (IROS), 2019.
- o Kaiyue, Li and Dianxi, Shi and Yongjun, Zhang and **Ruoxiang**, **Li** and Ruihao, Li, "Feature Tracking Based on Line Segments with the Dynamic and Active-pixel Vision Sensor (DAVIS)," In submission.
- Zhuoyue, Yang and Dianxi, Shi and Yongjun, Zhang and Shaowu, Yang and Fu, Li and Ruoxiang, Li, "Multi-UAV Collaborative Monocular SLAM Focusing on Data Sharing," International Conference on Neural Information Processing. Springer, Cham, 2018.

## **WORK EXPERIENCE**

# Inspur Communication Information System Co., Ltd.

Jinan, China P.R.

Intern

Jul. 2016 - Aug. 2016

- Duties included: Java Web development, especially the development of database interaction module
- Skills included: HTML5 and Spring/Spring MVC/Hibernate framework

## **HONORS AND AWARDS**

# National University of Defense Technology

2017 - Present

- o Postgraduate Admission Scholarship (Nov. 2018)
- o Outstanding Postgraduate (Jun. 2019)

### **Northeastern University**

2014 - 2017

- o Second-class Scholarship (Apr. 2014)
- o Second-class Scholarship (Oct. 2014)
- o Outstanding Student Leader (Oct. 2014)
- o Third-class Scholarship (Nov. 2015)
- o Outstanding Student Leader (Nov. 2015)
- o First-class Scholarship (Oct. 2016)
- o Zhongtian Iron and Steel Scholarship (Second-Class) (Oct. 2016)
- Second-class Scholarship (Oct. 2017)
- Outstanding Graduate of Liaoning Province (Mar. 2017)

# **KEY SKILLS**

**Programming Language** C, C++, Matlab, Python, Java, YAML

LibrariesOpenCV, Eigen, PCLFrameworksROS, Tensorflow

Software & Tools CMake, Zotero, Latex, Git

Operate System Windows, Linux

## REFERENCES

## o Prof. Dr. Dianxi Shi

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Professor, Science and Technology on Parallel and Distributed Laboratory

National University of Defense Technology, Changsha-410073, China P.R..

Artificial Intelligence Research Center (AIRC), National Innovation Institute of Defense Technology (NIIDT), Beijing-100166, China P.R..

Tianjin Artificial Intelligence Innovation Center (TAIIC), Tianjin-300457, China P.R..

### o Dr. Ruihao Li

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Dr. Ruihao Li received his Ph.D. from UniversityofEssex, Colchester, UK.

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