Ruoxiang Li | Curriculum Vitae

Kaifu District, Changsha, Hunan, China – 410073

✉ liruoxiang17@nudt.edu.cn   ☐ (+86) 151 1631 9671   🌐 Homepage

RESEARCH INTEREST

Event-based SLAM, Computer Vision, Robotics

EDUCATION

National University of Defense Technology (Non-military student)   **Changsha, China**
Master of Engineering in Computer Science and Technology   *Sept. 2017 - June 2020*
Advisor: Prof. Dr. Dianxi Shi

Northeastern University   **Shenyang, China**
Bachelor of Engineering in Internet of Things   *Sept. 2013 - June 2017*
GPA: 3.8085/5 (Ranking: 6/59)

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,"* Accepted by IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), 2019.

- 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.

COMPETITION EXPERIENCE

ABU Robocon (Third Award, Best Design Award)   *June 2015*
- **Team Task:** Independently design two robots cooperating to play badminton doubles.
- **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.
- **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 μC/OSII system (using C language).
- **Skills & devices:** CAN communication, Gyroscope, Encoder

PROJECT EXPERIENCE

Intelligent Unmanned Cluster System   *2017 - Present*
- Aim to construct operational support platform for the intelligent unmanned cluster system.
- Participate in the research of multi-UAV collaborative Monocular SLAM focusing on data sharing which is part of incremental global view extension technology.

COURSES

Master *2017 - 2018*
- Machine Learning (A)
- Matrix Analysis and Calculation (B)
- Principle of Artificial Intelligence (B)
- Computational Complexity (B)
- Computational Geometry (B)
- Parallel Computing (B)

Bachelor *2014 - 2017*
- Object-Oriented Programming (C++) (97)
- Algorithm Design and Analysis (95)
- Probability Theory and Mathematical Statistics (90)
- Data Structures (89)
- Linear Algebra (86)

HONORS AND AWARDS

National University of Defense Technology *2017 - Present*
- Postgraduate Admission Scholarship (Nov. 2018)
- Outstanding Postgraduate (June 2019)

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

REFERENCES

- **Prof. Dr. Dianxi Shi**
  Email: dxshi@nudt.edu.cn
  Affiliation: National University of Defense Technology, Changsha, 410073 , China

- **Dr. Ruihao Li**
  Email: liruihao2008@gmail.com
  Affiliation: Artificial Intelligence Research Center (AIRC), National Innovation Institute of Defense Technology(NIIDT), Beijing, 100166, China