Kun Luo

Location: No.95 Zhongguancun East Road, Beijing, China
My Academia Webpage || GPA: 90.5/100 5/180 3.78/4 ||Email: lksteven2013@163.com | Mobile: (+86)15727531305

Master Student Majoring in Automation

I am a Master student in the Institute of Automation, Chinese Academy of Sciences.I am highly skilled with almost **3 years study experience** in **trajectory planning,motion control** of a 7-DoF manipulator, involving with force and position compositioned compliant control.I have gained theoretical knowledge and conducted practical experiments in **robotics visual perception, motion planning and controlling** with a focuses on redundant armed robots.

Technical Skills

Languages	:	Chinese(Simplified),English,Japanese
Programming	:	MATLAB,Python,C++
Dev Tools	:	MATLAB,ROS,Visual Studio Code, Git

Publications

Conference/Journal Paper

- kun Luo, Gang Xiong, Sheng Liu, Shichao Chen*(2021).Research on Trajectory Planning and Motion Control of 7-DoF Sawyer Manipulator. In 2021 IEEE 1st International Conference on Digital Twins and Parallel Intelligence (DTPI).
- Hang Zhao, Sheng Liu, Kun Luo, Shichao Chen, Linghui Kong, Fan Jia(2021).Study on Applications for KubeEdge Edge-Computing Systems. Chinese Journal of Intelligent Science and Technology.2021 Dec.Vol.3 No.4

To Publish

- Motion Plan and Control Design of Redundant Manipulators Coupled with Adaptive Impedance and Admittance Control in Contact-rich Tasks(to submit on March,2023)
- A Parallel Control Method for Redundant Armed Robots Using Vision Guidance(to accomplish on April,2023)

Education

Beijing Institute of Technology — School of Automation
Bachelor of Engineering in Automation — *Sep 2011 – Jun 2016*

Linköping University,Sweden — Department of Electrical Engineering
CSC Undergraduate Exchange Student — *Aug 2014 – Jun 2015*

Waseda University,Japan — Graduate School of Information,Production and Systems
Master of Engineering in Electronics — *Sep 2016 – Jan 2018*

University of Chinese Academy of Sciences — the Institute of Automation
Master of Engineering in Electrical Informatics — *Sep 2020 – Jun 2023*

Projects and Certificates

Project 1 *Chinese Intitute of Electronics-Tecent Robotics X Robotics Research Specialization 2020* Sep 2020 - Nov 2021

- Design **trajectory planning algorithms** for 7-DoF collaborative Robot Sawyer in **ROS** using **MoveIt** framework
- Execute planar grasp task in Pybullet simulation based on GGCNN **deep learning** approach
- Utilize **MATLAB and ROS Gazebo** to simulate the pick-and-place task
- Software Copyright -A Trajectory Planning and Motion Contorl Method for 7-DoF Rethink Sawyer Robot

Project 2 *UCAS 2021 Innovation and Entrepreneurship Competition* Jun 2021 - Mar 2022

- Replace ROS service communication with **Web applications**
- Design variable and adaptive **Impedance/Admittance control** for garbish-categorizing tasks
- The First Prize for Garbish-Picking Robot in Starter's Track of UCAS 2021 Innovation and Entrepreneurship Competition