Honghao Lv

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Education

- Feb. 2018−Present:
  Doctoral Candidate in Mechatronic Engineering, School of Mechanical Engineering, Zhejiang University (ZJU), Hangzhou, China
- May 2018: Training Programme of Simulation in RobotStudio, ABB Engineering Ltd., Shanghai, China
- Sep. 2014−Jun. 2018:
  B. Eng. in Mechanical Engineering, School of Mechatronic Engineering, China University of Mining and Technology (CUMT), Xuzhou, China
  Academic Achievement: average score 91.63(100), GPA 3.8635(4), rank 3/360
- English Proficiency: CET-4 512, CET-6 468
- Computer Skills: NCRE Rank II (Visual Basic), NCRE Rank III (Internet technology)

Specialty

- Dual-arm Robotic Teleoperation & Human-Robot Collaboration
- Human-Robot Intelligent Interface & Safe Interaction
- Artificial Intelligence and its applications in Robotics

Publication List

- Journal Papers:
  [1] Huiying Zhou, **Honghao Lv**, Zhibo Pang, Xiaoyan Huang, Huayong Yang, Geng Yang*, "IoT-enabled Dual-arm Motion Capture and Mapping for Telerobotics in Homecare" IEEE Journal of Biomedical and Health Informatics (IEEE JBHI), 2019
  [2] Yang Geng, **Lv Honghao**, Chen Feiyu, Pang Zhibo, Wang Jin, Yang Huayong, Zhang Junhui*, "A Novel Gesture Recognition System for Intelligent Interaction with a Nursing-Care Assistant Robot" Applied Sciences-Basel, IF:2.217, vol. 8, (12), art. no. 2349, Dec. 2018. DOI: 10.3390/app8122349.
  [3] Chen Feiyu, **Lv Honghao**, Pang Zhibo, Zhang Junhui, Hou Yonghong, Gu Ying, Yang Huayong and G. Yang*, "WristCam: A Wearable Sensor for Hand Trajectory Gesture Recognition and Intelligent Human-Robot Interaction" IEEE Sensors Journal. IF: 3.076, pp. 1-1, Oct. 2018. DOI: 10.1109/JSEN.
- Conference Papers (peer-reviewed):
  [1] Huiying zhou, **Honghao Lv**, Kang Yi, Zhibo Pang, Huayong Yang, Geng Yang*, "An IoT-Enabled Telerobotic-Assisted Healthcare System Based on Inertial Motion Capture" in the 2019 IEEE International Conference on Industrial Informatics (INDIN 2019), Helsinki, 22-25 Jul., 2019.
  [2] Pan Shimin, **Lv Honghao**, Duan Hong, Pang Gaoyang, Yi Kang, and Yang Geng*, "A Sensor Glove for the Interaction with a Nursing-Care Assistive Robot", in the 2019 IEEE International Conference on Industrial Cyber-Physical Systems (ICPS 2019), Taipei, 6-9 May, 2019.
  [3] Huiying Zhou, Liu Yang, **Honghao Lv**, Kang Yi, Huayong Yang, and Geng Yang*, "Development of a Synchronized Human-Robot-Virtuality Interaction System using Cooperative Robot and Motion Capture Device", in the IEEE/ASME International Conference on Advanced Intelligent Mechatronics (AIM 2019), Hongkong, 8-12 Jul., 2019.
- Patents:
  [1] Yang Geng, **Lv Honghao**, Zhang Zhiyu, Yang Huayong, Zhejiang University; A Software for Acquisition and Analysis of Dual-arm Robot's Movement Status: Registration No.2020SR0061078.
  [2] Yang Geng, **Lv Honghao**, Pang Gaoyang, Yang Huayong, Zhejiang University; A Dirigible Dual-arm Omnidirectional Mobile Nursing-care Robot: CN201810534638.1[P]. 2018-10-26. (Invention publication)

[3] **Lv Honghao**, Hao Jingbin, Jia Kun, China University of Mining and Technology; A Smart Home System Based on LabView and TCP/IP Network Protocol: CN201721694857.3[P]. 2017-12-07. (Utility model)

[4] Ding Haigang, **Lv Honghao**, Cheng Gang, Zhao Jiyun, Cao Chao, China University of Mining and Technology; A Speed Measuring Device for Large Diameter Rotating Shaft without Protruding End.: CN201711391943.1[P]. 2017-12-21. (Invention publication)

Research Projects

- Zhejiang University Special Scientific Research Fund for COVID−19 Prevention and Control (Grant No. 2020XGZX017) 2020:
  Project Leader *Application of Tele-Robotic Technology for Auxiliary Diagnosis and Treatment of COVID−19 in Isolation Ward*
- Robotics Institute of Zhejiang University (Grant No. K18-508116-008-03) 2019:
  Project Leader *Human-robot Collaborative Assembly Based on Target Recognition Using Kinect and Security Interaction Design*
- Robotics Institute of Zhejiang University (Grant No. K18-508116-008-03) 2018:
  Project Leader *Cooperative Control System of Dual-Arm Robot Based on Human Action Recognition*

Awards

- 2nd Prize, ChapHoyea Scholarship of ZJU Dec. 2019
- 2nd Prize in Robot Innovative Design Competition of ZJU Jun. 2019
- Excellent Graduation Project of CUMT Jun. 2018
- National Scholarship Nov. 2017
- National Scholarship Nov. 2016
- National Scholarship Nov. 2015
- 2nd prize, China Undergraduate Mathematical Contest in Modeling Sep. 2015
- 3rd prize, Virtual Instrument Contest of Jiangsu Province Oct. 2016
- 3rd prize, Mathematical Modeling Contest of Jiangsu Province May 2016
- 1st prize, Curriculum Design of Machine Design Contest Mar. 2017

Honors & Social Activities

- Merit Graduate Student of ZJU 2019
- Excellent Graduate Student of ZJU 2019
- Sun-Yueqi Outstanding Student Award 2018
- Outstanding Graduates of CUMT 2018
- Merit Student of Jiangsu Province 2018
- Outstanding Student Cadre of Shandong Province 2014
- Merit Student of Zibo City 2011
- Excellent Individual in Military Training 2014
- Vice president of Party Workstation 2017
- Excellent Student Cadre and League Member of CUMT 2015, 2016, 2017
- Excellent volunteer of Xuzhou Central Hospital 2015

Research Experience in CUMT

- Project Leader Apr. 2016−Dec. 2016
  Participated in Training Program of Innovation for Undergraduates with the project called *the development of a portable friction coefficient tester*; Built a prototype which has been tested successfully; In charge of designing the hardware circuit and programming the whole LabVIEW codes.
- Participant Jul. 2016−Jun. 2018
  Took part in the project called *the development of intelligent home based on face recognition and voice*

control; Obtained the 3rd prize in the Virtual Instrument Contest of Jiangsu Province; In charge of assembling and debugging of the hardware.

- Participant Apr. 2017−Jun. 2018

  Involved in the project named *the design of robot key parts based on the 3D printing*; In charge of modeling and analyzing the 3D models.