YIDE LIU

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[Homepage] [Google Scholar] [ResearchGate] [YouTube Channel]

EMPLOYMENT HISTORY

Postdoctoral September 2023 - now

· Advisor: Prof. Xinjun Liu

EDUCTAION

Ph.D., Zhejiang University in Mechanics September 2018 - July 2023

· Thesis title: Structure design and bionic control of micro robots and assembly system
· Advisor: Prof. Shaoxing Qu

B.Eng., Harbin Institute of Technology in Mechatronics September 2014 - July 2018

· GPA: 3.44/4, Rank: #2, Honors School - *150 selected from over 4200 students*
· Advisor: Prof. Jihong Yan

AWARDS, SCHOLARSHIPS, AND RECOGNITIONS

RSS Pioneers July 2023

· One of the 30 top graduate students selected to participate in the RSS Pioneers Workshop (22% acceptance rate)
· Robotics: Science and Systems Conference

Zengqi Lu Outstanding Ph.D. students award September 2021

· One of the 10 top graduate students
· State Key Laboratory of Fluid Power and Mechatronic Systems, Zhejiang University

Excellent thesis July 2018

· One of the 100 students selected from over 4200 students
· Harbin institute of Technology

RESEARCH INTERESTS AND SKILLS

Interests: Robotic Insects / Multi-robot Systems / Central Pattern Generator / Small Parallel Robots
Skills: Solidworks, Adams, Abaqus, Python, Matlab, Mathematica, LaTeX

PUBLICATIONS

(# for co-first author, * for corresponding author)

Yide Liu, Bo Feng, Tianlun Cheng, Yanhong Chen, Xiyan Liu, Jiahang Zhang, Shaoxing Qu, and Wei Yang. (2023). Singularity Analysis and Solutions for the Origami Transmission Mechanism of Fast-Moving Untethered Insect-scale Robot. ***IEEE Transactions on Robotics***.

Yide Liu, Yanhong Chen, Bo Feng, Dongqi Wang, Taishan Liu, Haofei Zhou, Hua Li, Shaoxing Qu, and Wei Yang. (2022) S^2worm: A Fast-moving Untethered Insect-scale Robot with 2-DoF Transmission Mechanism. ***IEEE Robotics and Automation Letters***, 7(3), 6758-6765.

Yanhong Chen #, Yide Liu#, Taishan Liu, Hua Li, Shaoxing Qu, and Wei Yang. (2022). Design and analysis of an untethered micro flapping robot which can glide on the water. ***SCIENCE CHINA Technological Sciences***, 65(8), 1749-1759.

Yide Liu, Donghao Zhao, Yanhong Chen, Dongqi Wang, Zhou Wen, Ziyi Ye, Jianhui Guo, Haofei Zhou, Shaoxing Qu, and Wei Yang. BioARS: Designing Adaptive and Reconfigurable Bionic Assembly Robotic System with Inchworm Modules. (2020). In ***2020 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*** (pp. 11681-11687). IEEE.

Yide Liu, Binhong Liu, Tenghao Yin, Yuhai Xiang, Haofei Zhou, Shaoxing Qu. (2019). Bistable rotating mechanism based on dielectric elastomer actuator. ***Smart Materials and Structures***, 29(1), 015008.

Donghao Zhao, Yide Liu, Binhong Liu, Zhe Chen, Guodong Nian, Shaoxing Qu, and Wei Yang. (2021). 3D printing method for tough multifunctional particle-based double-network hydrogels. ***ACS Applied Materials and Interfaces***, 13(11), 13714-13723.

Xiaocheng Hu, Yimou Fu, Yide Liu, Binhong Liu, and Shaoxing Qu. (2021). Acarid Suction Cup-Inspired Rapid and Tunable Magnetic Adhesion. ***Advanced Materials Technologies***, 6(8), 2100004.

Yimou Fu, Xiaocheng Hu, Yide Liu, Peng Wang, Shuo Chen, Haofei Zhou, Honghui Yu, Shaoxing Qu, and Wei Yang. (2022). Impact-induced bubble interactions and coalescence in soft materials. ***International Journal of Solids and Structures***, 238, 111387.

ACADEMIC SERVICES

· Reviewer for **IEEE T-RO IEEE RA-L**

WORK EXPERIENCE

DJI Technology Co., Ltd. July 2017

· Leader of the mechanical design internship group - *the group consists of 100 interns selected from over 1000 students*

· ***2017*** Third Place of the DJI international internship robot competition