Yuhao Zhou

zhou@race.t.u-tokyo.ac.jp
Webpage : Yuhao-Zhou.com
Github : github.com/YuHoChau
Room 1126, Engineering Building 3
7-3-1, Hongo, Bunkyo-Ku, Tokyo 113-8656, Japan

Education

The University of Tokyo — Tokyo, Japan
M.Eng. in Precision Engineering — Oct.2021 - Sep.2023 (Expected)
- *Supervisor: Prof. Jun Ota*

Guangdong University of Technology — Guangzhou, P.R. China
B.Eng. in Electrical Engineering and Automation, GPA: 82% — Sep.2016 - Jun.2020
- *Supervisor: Prof. Zhifeng Huang*

Nanyang Technological University — Singapore
School of Electrical and Electronic Engineering, GPA: 3.5/5.0 — Jan.2021 - May.2021

Northeastern University — Boston, MA, USA
Department of Electrical & Computer Engineering, GPA: 3.33/4.00 — Jun.2020 - Aug.2020

Experience

Graduate Student Researcher @ Mobile Robotics Laboratory — Oct.2021 - Present
Department of Precision Engineering, the University of Tokyo

Student Researcher @ Jet Power and Humanoid Robot Laboratory — Oct.2018 - Oct.2020
School of Automation, Guangdong University of Technology

Summer Internship @ CloudMinds Robotics Co., Ltd. — Jul.2019 - Aug.2019

Pre-Prints

*Co-first authors

Y Li*, **Y Zhou***, J Huang, Z Wang, S Zhu, K Wu, L Zheng, J Luo, R Cao, Y Zhang & Z Huang, "Design of a Flying Humanoid Robot Based on Thrust Vector Control", ***arXiv 2108.11557.***

Publications

Z Huang, Z Wang, J Wei, J Yu, **Y Zhou**, P Lao, X Huang, X Zhang & Y Zhang, "Three-Dimensional Posture Optimization for Biped Robot Stepping over Large Ditch Based on a Ducted-Fan Propulsion System", ***IROS'20.***

Research Projects

Jet-Powered Humanoid Robot: Jet-HR1 — Oct.2018 - Oct.2020
Supervisor: Prof. Zhifeng Huang
- A prototype disaster-response humanoid robot innovatively utilized the ducted-fan propulsion system for balancing the gravitational moment
- Conduct experiments based on 2D & 3D gaits to accomplish large obstacle-crossing (97% of the robot's leg length, and a height difference of 100mm between two sides)

Jet-Powered Flying Humanoid Robot: Jet-HR2 — Jan.2019 - Oct.2020
Supervisor: Prof. Zhifeng Huang
- Independently designed the mechanical system of the robot with 6 ducted-fans to have the capacity of flight, contact locomotion, and manipulation
- Implemented dynamic simulations of the prototype robot in PyBullet SDK
- Led the design, fabrication, and experiments of prototype robot such as jet-jumping and flying motions

Selected Awards

JASSO Scholarship, Ministry of Education, Culture, Sports, Science and Technology of Japan — Oct.2021
NU's Summer Scholarship, Northeastern — Jun.2020
Outstanding Undergraduate Thesis paper (Top 3%), GDUT — Jun.2020
System Design of Flying Humanoid Robot
National-level Funding in IETP for College Students, Ministry of Education of China — Mar.2020
Third Award (University-level) in 16^{th} Challenge Cup, Ministry of Education of China — Mar.2019

Skills

Languages: Python, MATLAB, LaTeX
Design: SolidWorks

Interests

Design of Mechanical and Mechatronic System, Robotics, Machine Learning