Yuhao Zhou

YZHOU035@e.ntu.edu.sg
Webpage : Yuhao-Zhou.com
Github : github.com/YuHoChau
50 Nanyang Ave, Singapore 639798

EDUCATION

The University of Tokyo   Tokyo, Japan
M.Eng. in Precision Engineering   Sep.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

EXPEREINCE

Graduate Student Researcher @ Mobile Robotics Laboratory   Starting in Sep.2021
Department of Precision Engineering, the University of Tokyo

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

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

PUBLICATIONS

Zhifeng Huang, Zijun Wang, Jiapeng Wei, Jingtao Yu, **Yuhao Zhou**, Pihao Lao, Xiaoliang Huang, Xuexi Zhang & Yun Zhang, "Three-Dimensional Posture Optimization for Biped Robot Stepping over Large Ditch Based on a Ducted-Fan Propulsion System", ***proceedings of the 2020 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS).***

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, hovering, and flying motions

SELECTED AWARDS

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
3rd **Award (University-level) in** 16th **Challenge Cup,** Ministry of Education of China   Mar.2019

SKILLS

Languages: Python, MATLAB, LaTeX
Design: SolidWorks, AutoCAD

INTERESTS

Design of Mechanical and Mechatronic System, Huamnoid Robotics, Mobile Robotics, Machine Learning