

Yangwei You

PERSONAL DATA

CITIZEN:	Chinese	DATE OF BIRTH:	November, 1989
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EDUCATION

2014.11-current	Istituto Italiano di Tecnologia , Italy Research Line: Humanoids and Human Centered Mechatronics	Ph.D.
2011.08-2013.07	Harbin Institute of Technology , China Major: Mechatronic Engineering in State Key Robotics Institute	Master
2007.08-2011.07	Harbin Institute of Technology , China Major: Mechanical Design, Manufacture and Automation	Bachelor

PROJECTS

<i>Current</i> NOV. 2014	Locomotion Control for Humanoid Robot WALK-MAN Ph.D. thesis in Istituto Italiano di Tecnologia. Focused on optimization-based high-level motion planning and low-level torque control on the whole-body humanoid robot as part of FP7 European project WALK-MAN. Good position tracking and accurate contact force regulation were achieved.
<i>May. 2017</i> MAR. 2017	Control Software Development for Cooky Robot Arms of MROBOT Ltd A short-term working package for the robot arm development of MROBOT Ltd. Based on ROS, developed a uniform control platform to perform simulation in Gazebo and run experiments on real robots with easy switch, where motion planning and teaching playback were integrated.
NOV. 2014 JULY 2013	Design Engineer in Sensata Technologies Worked as a design engineer in an American Company "Sensata Technologies" in China mainland, mainly in charge of the deformation analysis and design of ceramic sensing element of the automotive pressure transducer.
JULY 2013 JULY 2011	Control Method Study of Stable Quadruped Trot Running Master thesis subordinated to the national 863 project of China. A combined simulation platform of ADAMS and MATLAB was built for a 3D quadruped robot. Different control strategies were investigated to realize stable running of quadruped robots.
OCT. 2012 JUNE 2012	Design and Manufacture of Contact Resistance Measuring Instrument A delicate fixture and a 3-axis motion platform were built to automatically measure the contact resistance between electrical contacts with static contact force control accuracy $\pm 0.005\text{N}$ and position control accuracy 0.1mm .
JUNE 2011 OCT. 2010	Software Development for Vitesse2 Microwave Oven of Whirlpool Ltd Bachelor thesis as a University and Whirlpool Joint R&D project. A synthetical control program, running in STM8 micro-controller, was developed successfully for the whole Vitesse2 microwave oven series, one software for different specifications.
SEPT. 2010 SEPT. 2009	Design of Portable and Multi-functional Rescue Instrument Won national first prize in the fourth national undergraduate mechanical innovative design competition with "portable and multifunctional rescue instrument" as team leader.

PUBLICATION

1. Songyan Xin, Yangwei You, Chengxu Zhou, Cheng Fang, and Nikos Tsagarakis. A torque-controlled humanoid robot riding on a two-wheeled mobile platform. In *International Conference on Intelligent Robots and Systems (IROS)*, 2017, Accepted.
2. Yangwei You, Chengxu Zhou, Zhibin Li, and Nikos Tsagarakis. A study of nonlinear forward models for dynamic walking. In *International Conference on Robotics and Automation (ICRA)*, 2017.
3. Yangwei You, Songyan Xin, Chengxu Zhou, and Nikos Tsagarakis. Straight leg walking strategy for torque-controlled humanoid robots. In *International Conference on Robotics and Biomimetics (ROBIO)*, 2016.
4. Yangwei You, Zhibin Li, Darwin G Caldwell, and Nikos G Tsagarakis. From one-legged hopping to bipedal running and walking: A unified foot placement control based on regression analysis. In *International Conference on Intelligent Robots and Systems (IROS)*, 2015.
5. Yangwei You, Zhibin Li, Nikos G Tsagarakis, and Darwin G Caldwell. Foot placement control for bipedal walking on uneven terrain: An online linear regression analysis approach. In *International Conference on Climbing and Walking Robots and Support Technologies for Mobile Machines (CLAWAR)*, 2015.

SCHOLARSHIPS

- 2015-2017 Ph.D Student Scholarship from Istituto Italiano di Tecnologia
- 2011-2013 Postgraduate Scholarship(first class 1 time, second class 1 time)
- 2007-2011 People's Scholarship(first class 1 time, second class 4 times, third class 2 times)
- 2007-2011 Fuji Xerox Enterprise Scholarship(1 time); STX Enterprise Scholarship(1 time)
- 2007-2011 Merit Student(2 times); Excellent Graduate of Harbin Institute of Technology

LANGUAGES

CHINESE: Mother tongue
ENGLISH: Fluent

COMPUTER SKILLS

Basic: Linux, CMake, Python, Protel.
Familiar: C, C++, MCU, SolidWorks, Matlab, ADAMS, ODE, ROS, GAZEBO, MoveIt!.
Knowledge: Kinematics, Dynamics, Motion planning, Robot control, Optimization.

INTERESTS AND ACTIVITIES

Robotics, Open-Source, Programming
Badminton, Swimming, Hiking