

Yangwei You

CONTACTS

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EDUCATION

2014.11-2018.02 **Italian Institute of Technology, Italy** Ph.D.
Research Line: Humanoids and Human Centered Mechatronics

2011.08-2013.07 **Harbin Institute of Technology, China** Master
Major: Mechatronic Engineering in State Key Robotics Institute

2007.08-2011.07 **Harbin Institute of Technology, China** Bachelor
Major: Mechanical Design, Manufacture and Automation

PROJECTS

Current | **Whole-body Control for Four-leg and Two-arm Robot Centauro**
MAY. 2018 | Work as a researcher in Institute for Infocomm Research of A* Singapore, focusing on the motion planning for robots with high DoFs and path planning for navigation.

FEB. 2018 | **Locomotion Control for Humanoid Robot WALK-MAN**
NOV. 2014 | *Ph.D. thesis* in Italian Institute of Technology. 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.

NOV. 2014 | **Design Engineer in Sensata Technologyes**
JULY 2013 | Mainly in charge of the deformation analysis and design of ceramic sensing element of the automotive pressure transducer.

JULY 2013 | **Study of Stable Quadruped Trotting Control**
JULY 2011 | *Master thesis* subordinated to the national 863 project of China. SLIP model and Virtual Model Control were utilized to realize stable trotting for quadruped robots.

OCT. 2012 | **Design of Contact Resistance Measuring Instrument**
JUNE 2012 | A delicate fixture and a 3-axis motion platform were built to automatically measure the contact resistance between electrical contacts.

JUNE 2011 | **Software Development for Microwave Oven of Whirlpool Ltd**
OCT. 2010 | *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.

SEPT. 2010 | **Design of Portable and Multi-functional Rescue Instrument**
SEPT. 2009 | Won *national first prize* in the fourth national undergraduate mechanical innovative design competition with “portable and multifunctional rescue instrument” as team leader.

EXPERTISE & SKILL

EXPERTISE: Optimization, Motion planning, Impedance control, Dynamics, Kinematics.

PROGRAM: C, C++, Python, Git, ODE, ROS, GAZEBO, MoveIt!, YARP.

SOFTWARE: Linux, Matlab, SolidWorks, ADAMS, Protel, ANSYS.

AWARDS

2015-2017 Ph.D Student Scholarship from Italian Institute of Technology

2011-2013 Postgraduate Scholarship(first class once, second class once)

2007-2011 People’s Scholarship(first class once, second class 4 times, third class twice)

National First Prize of Undergraduate Mechanical Design Competition

Fuji Xerox Enterprise Scholarship; STX Enterprise Scholarship

Excellent Graduate of Harbin Institute of Technology

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.
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 Caldwell, and Nikos 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 Tsagarakis, and Darwin 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.