

ZeruiWANG

a Ph.D. candidate who is obsessed by robotics

about

Room 112
ERB
CUHK
Shatin, N.T.
Hong Kong

zerui.j.wang@gmail.com
www.wangzerui.com
gh://zrwang
ln://zrwang
fb://zrwang
g+://zrwang
tw://zrwang

languages

Chinese
English

programming

C++/C
Python

education

- since 2013 **Ph.D.** in Mechanical & Automation Engineering The Chinese Univ. of Hong Kong
Cumulative GPA: 3.917/4
Research interests:
Safety mechanism design in robotic surgery
Visual servoing in robotic surgery
(soft tissue manipulation, dissection and suturing)
- 2012 **Exchange** in Europe TU Delft, VUB, U-PSUD, ECP, ISAE
Most selective elite delegation among students (top 0.75%)
- 2009–2013 **BEng.** in Quality and Reliability Engineering Beihang University
Overall GPA: 3.84/4 (90.04/100)
Rank **1st** in School of Reliability & System Engineering
- 2006–2009 **Senior high school student** Urumqi No.1 Senior High School
Top 0.18% in the National College Entrance Examination
The 1st Prize in National Olympiad in Informatics
The 2nd Prize in Chinese Physics Olympiad
Nominated as Excellent Student for **three** consecutive years

honors & awards

- Aug. 2013 **Awardee of Hong Kong PhD Fellowship**
- Nov. 2012 **Champion of Innovative Underwater Robot Design
China Robot Contest & RoboCup Open**
- Jul. 2012 **The 2nd-Prize in National University Mechanical Innovation Competition**
(10%)
- Dec. 2010 **The 2nd-Prize in National Undergraduate Physics Competition**
(7.5%)
- Nov. 2010 **National Scholarship for University Students**
(2.6%)
- Nov. 2011 **Excellent Students Awards of Beijing**
(1.1%)
- Nov. 2011 **Elite Student of Beihang University**
(3%)
- Mar. 2012 **Outstanding Student Award, Yang Weimin Special Scholarship**
(0.8%)
- Dec. 2011 **The 2nd-Prize Scholarship of Academic Contest**
(3%)
- 2010-2012 **The 1st-Prize Scholarship of Science and Engineering Contest**
(7%)
- 2010-2012 **The 1st-Prize Scholarship of Academic Performance**
(3%)

publications

*

Journal

Design of a Novel Compliant Safe Robot Joint with Multiple Working States

Z. Wang, H. M. Yip, D. Navarro-Alarcon, P. Li, Y.-H. Liu

IEEE/ASME Trans. Mechatronics, revised and resubmitted (2015). 2015

Development of an Assistive Surgical Robot for Laparoscopic Hysterectomy

H. M. Yip, Z. Wang, D. Navarro-Alarcon, P. Li, Y.-H. Liu, T. H. Cheung, Y. Fu

IEEE/ASME Trans. Mechatronics, under review (2015). 2015

Automatic 3D Manipulation of Soft Objects by RCM Robotic Instruments with Adaptive Deformation Model

D. Navarro-Alarcon, H. M. Yip, Z. Wang, Y.-H. Liu, P. Li

IEEE Trans. Robot., under review (2015). 2015

*

Conference

Design and Control of a Novel Multi-state Compliant Safe Joint for Robotic Surgery

Z. Wang, P. Li, D. Navarro-Alarcon, H. M. Yip, Y.-H. Liu, W. Lin, L. Li

IEEE Int. Conf. Robotics and Automation, 2015

A New Robotic Uterine Positioner for Laparoscopic Hysterectomy with Passive Safety Mechanisms: Design and Experiments

H. M. Yip, Z. Wang, D. Navarro-Alarcon, P. Li, Y.-H. Liu

IEEE/RSJ Int. Conf. Intelligent Robots and Systems, 2015

Gradient Descent Adaptive Methods to Automatically Position 3-DOF RCM Mechanisms with a Monocular Camera

D. Navarro-Alarcon, H. M. Yip, Z. Wang, Y.-H. Liu, W. Lin, P. Li

IEEE/RSJ Int. Conf. Intelligent Robots and Systems, 2015

A New Robotic Uterine Positioner for Laparoscopic Hysterectomy with Passive Safety Mechanisms: Design and Experiments

W. Lin, D. Navarro-Alarcon, P. Li, Z. Wang, H. M. Yip, Y.-H. Liu

IEEE/RSJ Int. Conf. Intelligent Robots and Systems, 2015

A Method to Regulate the Torque of Flexible-joint Manipulators with Velocity Control Inputs

D. Navarro-Alarcon, Z. Wang, H. M. Yip, Y. Liu, P. Li, W. Lin

IEEE Int. Conf. Robotics and Biomimetics, 2014

A new circular-guided remote center of motion mechanism for assistive surgical robots

H. M. Yip, P. Li, D. Navarro-Alarcon, Z. Wang, Y.-H. Liu

IEEE Int. Conf. Robotics and Biomimetics, 2014