

Fan Zhang

Contact Information	<p>Personal Robotics Lab Department of Electrical and Electronic Engineering Imperial College of Science, Technology and Medicine Room 1006, Exhibition Road, SW7 2BT, London, UK.</p>	<p>Email: fanzhang0@outlook.com www: www.zhang-fan.com</p>
Research Interests	Human-Robot Interaction, Machine Learning, Surgical Robot	
Education	<p>Imperial College London Ph.D. in Electrical Engineering, Oct 2016 ~ present Thesis: Personalized Dressing Assistance by Humanoid Robots Supervisor: Prof. Yiannis Demiris</p> <p>Harbin Institute of Technology M.Sc in Mechatronics, Sep 2014 ~ Jul 2016 Thesis: Preoperative Guidance Optimization for Multi-Arm Surgical Robots Supervisor: Prof. Zhijiang Du</p> <p>Harbin Institute of Technology B.Eng. in Mechanical Engineering, Sep 2010 ~ Jul 2014 Thesis: Mechanical Analysis of Scissor Lifts Considering Friction Supervisor: Prof. Yuan Xue</p>	
Awards and Achievements	<p>Conference Awards Best Student Paper Award, IEEE International Conference on Mechatronics and Automation (ICMA), 2016</p> <p>Chinese Scholarship Council Chinese Government full CSC Scholarship, 2016</p> <p>Harbin Institute of Technology Best Msc Thesis Award, 2016 (<10%) Outstanding Master's Graduates, 2016 (<10%)</p> <p>National Basic Foreign Language Teaching Research Centre National English Contest for College Students, First Prize, 2013 (0.6%)</p>	
Journal Publications	<p>Yan Z, Du Z, Zhang F, Wang W (2018). <i>Preoperative optimization of the surgical robot considering internal diversity of workspace</i>. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 232(6), pp.1091-1107</p> <p>Chen J, Yan Z, Zhang F (2016). <i>Mechanical Analysis and Finite Element Simulation of Scissor Transmission Mechanism under Partial Load</i>, Key Engineering Materials, vol. 667, pp: 518-523.</p>	

Zhang F, Chen J, Yan Z (2013). *Mechanical Analysis of Scissor Transmission Mechanism Considering Friction*, Applied Mechanics and Materials, vol. 419, pp: 74-80.

Conference Publications **Zhang F**, Cully A, Demiris Y (2017). *Personalized Robot-assisted Dressing using User Modeling in Latent Spaces*, IEEE International Conference on Intelligent Robots and Systems ([IROS 2017](#)), Canada, pp: 3603-3610.

Zhang F, Yan Z, Du Z (2017). *Preoperative Planning for the Multi-arm Surgical Robot using PSO-GP-based Performance Optimization*, IEEE International Conference on Robotics and Automation ([ICRA 2017](#)), Singapore, pp: 5629-5635.

Zhang F, Yan Z, Du Z (2016). *Preoperative Setup Planning for Robotic Surgery Based on a Simulation Platform and Gaussian Process*, IEEE International Conference on Mechatronics and Automation (ICMA 2016), China, pp: 902-907. --- [Best Student Paper Award](#)

Zhang F, Su Y, Zhang X, Dong W, Du Z (2015). *An Under-actuated Manipulation Controller Based on Workspace Analysis and Gaussian Processes*. IEEE/RSJ International Conference on Intelligent Robots and Systems ([IROS 2015](#)), Germany, pp: 5629-5635.

Technical Abilities MATLAB, C/C++, Python, Robot Operating System (ROS), ADAMS, Linux Operating Systems, LaTeX

Outreach *Vice President, Students' Union*, School of Mechatronics Engineering, Harbin Institute of Technology, Sep 2012 ~ Sep 2013