

Fan Zhang

Contact Information	Personal Robotics Lab Department of Electrical and Electronic Engineering Imperial College of Science, Technology and Medicine Room 1006, Exhibition Road, SW7 2BT, London, UK.	Email: f.zhang16@imperial.ac.uk www:www.zhang-fan.com
Research Interests	Human-Robot Interaction, Robot-Assisted Dressing, Deep Imitation Learning, Surgical Robot, Dexterous Manipulation	
Education	Imperial College London Ph.D. in Electrical Engineering , Oct 2016 ~ present Thesis: Personalized Robotic-Assisted Dressing Supervisor: Prof. Yiannis Demiris 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 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	
Awards and Achievements	Conference Awards Best Student Paper Award, IEEE International Conference on Mechatronics and Automation (ICMA) , 2016 Chinese Scholarship Council Chinese Government full CSC Scholarship, 2016 Harbin Institute of Technology Best Msc Thesis Award, 2016 (<10%) Outstanding Master's Graduates, 2016 (<10%) Vice President, Students' Union, Sep 2012 ~ Sep 2013 National Basic Foreign Language Teaching Research Centre National English Contest for College Students, First Prize, 2013 (0.6%)	
Talks	Human Motion Analysis for Healthcare Applications , IET, Jun 2019 The Hamlyn Centre, Imperial College London , Nov 2017 The 2nd UK Robot Manipulation Workshop , Jul 2017	
Technical Abilities	MATLAB, C/C++, Python, Robot Operating System (ROS), Linux Operating Systems, ADAMS, Autodesk Fusion 360, Maya, LaTeX, 3D printing	

- Journal Publications **Zhang F**, Cully A and Demiris Y (2019). *Probabilistic Real-Time User Posture Tracking for Personalized Robot-Assisted Dressing*, [IEEE Transactions on Robotics](#).
- Yan Z, Du Z, **Zhang F**, Wang W (2018). *Preoperative optimization of the surgical robot considering internal diversity of workspace*, Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 232(6), pp.1091-1107
- Chen J, Yan Z, **Zhang F** (2016). *Mechanical Analysis and Finite Element Simulation of Scissor Transmission Mechanism under Partial Load*, Key Engineering Materials, vol. 667, pp: 518-523.
- 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.