

# Fan Zhang

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Contact Information	<p><a href="#">Personal Robotics Lab</a> <a href="#">Department of Electrical and Electronic Engineering</a> <a href="#">Imperial College of Science, Technology and Medicine</a> Room 1006, Exhibition Road, SW7 2BT, London, UK.</p>	<p>Email:<a href="mailto:f.zhang16@imperial.ac.uk">f.zhang16@imperial.ac.uk</a> www:<a href="http://www.zhang-fan.com">www.zhang-fan.com</a></p>
Research Interests	Human-Robot Interaction, Robot-Assisted Dressing, Deep Imitation Learning, Surgical Robot, Dexterous Manipulation	
Education	<p><a href="#">Imperial College London</a> <b>Ph.D. in Electrical Engineering</b>, Oct 2016 ~ present Thesis: Personalized Robotic-Assisted Dressing Supervisor: Prof. <a href="#">Yiannis Demiris</a></p> <p><a href="#">Harbin Institute of Technology</a> <b>M.Sc in Mechatronics</b>, Sep 2014 ~ Jul 2016 Thesis: Preoperative Guidance Optimization for Multi-Arm Surgical Robots Supervisor: Prof. <a href="#">Zhijiang Du</a></p> <p><a href="#">Harbin Institute of Technology</a> <b>B.Eng. in Mechanical Engineering</b>, Sep 2010 ~ Jul 2014 Thesis: Mechanical Analysis of Scissor Lifts Considering Friction Supervisor: Prof. <a href="#">Yuan Xue</a></p>	
Awards and Achievements	<p><a href="#">Conference Awards</a> Best Student Paper Award, <a href="#">IEEE International Conference on Mechatronics and Automation (ICMA)</a>, 2016</p> <p><a href="#">Chinese Scholarship Council</a> Chinese Government full CSC Scholarship, 2016</p> <p><a href="#">Harbin Institute of Technology</a> Best Msc Thesis Award, 2016 (&lt;10%) Outstanding Master's Graduates, 2016 (&lt;10%)</p> <p><a href="#">National Basic Foreign Language Teaching Research Centre</a> National English Contest for College Students, First Prize, 2013 (0.6%)</p>	
Invited Talks	<p><a href="#">The Hamlyn Centre, Imperial College London</a> "Personalized Robot-assisted Dressing using User Modeling in Latent Spaces", Nov 2017</p>	
Technical Abilities	MATLAB, C/C++, Python, Robot Operating System (ROS), Linux Operating Systems, ADAMS, Autodesk Fusion 360, LaTeX	
Outreach	<p><i>Vice President</i>, <b>Students' Union</b>, School of Mechatronics Engineering, Harbin Institute of Technology, Sep 2012 ~ Sep 2013</p>	

- 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.