

Yan Wu (Sr Member IEEE)

CONTACT INFORMATION	Robotics Department Institute for Infocomm Research Agency for Science, Technology and Research 1 Fusionopolis Way, #21-01 Connexis (South), Singapore 138632	<i>Tel:</i> +65 6408 2719 <i>Mobile:</i> +65 8182 4026 <i>Email:</i> yan.wu@yan-wu.com <i>www:</i> www.yan-wu.com
RESEARCH INTERESTS	Service and Assistive Robotics and Technology, Robot Learning by Demonstration, Human-Robot Interaction, Machine Learning	
EDUCATION	Imperial College London , London, United Kingdom PhD. in Electrical Engineering , Oct 2008 ~ Sep 2012 <ul style="list-style-type: none">• Thesis: Towards Robot Learning of Tool Manipulation from Demonstrations• Supervisor: Prof Yiannis Demiris• Area of Study: Human-Robot Interaction, Machine Learning The University of Cambridge , Cambridge, United Kingdom MA.(Cantab), BA.(Hons) , Oct 2004 ~ Jun 2007 <ul style="list-style-type: none">• Information and Computer Engineering• Courses: Computational Neuroscience, Control and Software Engineering, Signal Processing and 2 years of general engineering training	
AWARDS	KUKA Joint Exhibition @ IEEE ICRA, 2017 SMP Outstanding Mentor, Ministry of Education, Singapore, 2015 Best Paper Award Finalist, IEEE Int'l Conf. on Robotics & Biomimetics, 2010 Certificate of Merit, World Congress on Engineering, 2008. A*STAR Chairman's Honours List, 2005. National Science Scholarship (BS - PhD), 2004 ~ 2012.	
WORK EXPERIENCE	New Nanyang Group Pte Ltd , Singapore <i>Independent Director, Advisor</i> Jan 2016 to present Help grow the technology-based travel start-up company <ul style="list-style-type: none">• Responsible for the conduct of the management• Provide founders with advice on relevant technologies, strategic growth areas and plans for investments• Provide training to junior staff on operations and technological tools Institute for Infocomm Research , Singapore <i>Scientist</i> Dec 2013 to present Co-Principal Investigator, Pholus Robot (S\$12M) , Apr 2016 - present <ul style="list-style-type: none">• Research Directions: Multimodal learning of robot motor skills and compliant human-robot interaction• Leading the effort on dexterous motor skill acquisition and interaction with other agent in a multi-legged centaur-like robot. Member, SERC Industrial Robotics Programme , Dec 2013 - Feb 2017 <ul style="list-style-type: none">• Research Direction: Industrial Learning by Demonstration• Focus on designing a learning model for industry production applications• Proposed and published a teach-on-the-fly framework• Patent filing of the framework is being processed by A*STAR ETPL	

- Member, **F2 Service Robot - Olivia III**, Oct 2014 to Oct 2015
- Designed & implemented the design of overall software architecture of Olivia
 - Designed & implemented the Central Control Unit of Olivia
 - Proposed & designed a hierarchical shadow contingency for Olivia

NHS Great Ormond Street Hospital for Children, London, UK

Research Fellow

Aug 2012 to Dec 2013

Improving the Motor Outcomes of Hemispherectomy in Children

- Concurrent Research Associate position at [UCL Institute of Child Health](#)
- Provide research guidance for the PhD student on the machine learning and engineering aspects of the work
- Design experiment protocols for kinematics outcomes assessments

The Institute of High Performance Computing, Singapore

Research Officer

Jul 2007 to Aug 2008

Principal Investigator, **Climatic factors influencing outbreak of dengue fevers in Singapore**, Sep 2007 to Jul 2008.

- Developed mathematical and computational models correlating climatic data and dengue outbreak.

Co-Principal Investigator, **Public education project on mosquito surveillance**, Sep 2007 to Jul 2008

- Initiated this nationwide education project for secondary school students on mosquito surveillance to study the dynamics of mosquito breeding and associated virus transmission patterns.
- Attracted and coordinated the participation of 1 university, 3 research institutes, 1 school and the Science Centre in the pilot phase.

Project Officer, **Flood warning system for Marina Barrage in Singapore**, Mar 2008 to Jul 2008

- Developed a warning model for immediate threat of flooding.
- Implemented an integrated prediction model for flood warning at different time resolution.

ADVISORY &
ACADEMIC
SERVICE

Advisor to Robotics, BoZhon Precision Co. Ltd, China and various robotics start-ups in Singapore and China

Supervised and co-supervised 2 PhD students, 7 Masters students, 1 A*STAR RA Scholar, various undergraduate interns, projects and pre-university projects.

Technical Committee Member (IEEE RAS Neuro-robotics), PC Member (IJCAI 2017), General Secretary (ITD Forum 2016), Publicity Chair (HAI 2016), Session Chair (IROS 2016, ROBIO 2009, WCE 2008), Reviewer for top robotics publications (including T-RO, RA-L, RAS, ICRA and IROS)

RECENT INVITED
TALKS

Towards Robot Learning by Demonstration (RLD) for Industrial Applications, 2016
Convention on Exchange of Overseas Talents, Ministry of Education, China, 2016

Human-Robot Interactivity for Service Robots, BoZhon Precision Co., China, 2016

On Industrial Human-Robot Collaboration, Workshop on Intelligent Technology of Collaborative Robot: Frontier & Challenges, Guangzhou Government, China, 2016

Towards Robot Learning of Affordance Understanding and Skill Acquisition, Aspire Centre @ UCL, UK, 2015