

Yan Wu (Sr Member IEEE)

CONTACT INFORMATION	Robotics & Autonomous Systems 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	Tan Kah Kee Young Inventor Award (Merit), Singapore, 2018 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 A*STAR Chairman's Honours List, 2005. National Science Scholarship (BS - PhD), 2004 ~ 2012.	
WORK EXPERIENCE	Institute for Infocomm Research , Singapore <i>Scientist</i> Dec 2013 to present Co-Investigator, Collaborative AI for Advanced Manufacturing Engineering , Nov 2018 to Nov 2023 <ul style="list-style-type: none">• Research Directions: Tactile touch sensing for object and environment understanding and safe interaction Co-Investigator, Project Pholus , 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 NHS Great Ormond Street Hospital for Children , London, UK <i>Research Fellow</i> 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-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.

ACADEMIC
SERVICE

Student Supervisions

Supervised and co-supervised 3 PhD students, 7 Masters students, 1 A*STAR RA Scholar, various undergraduate interns, projects and pre-university projects.

Technical Services

General Secretary, Teochew Doctorate Society, Singapore 2018 -

Director, Int'l Teochew Doctors Association, 2017 -

TC Member, IEEE RAS Neuro-robotics Technical Committee, 2017 -

Conference and Editorial Services

Guest Editor: Applied Science, IEEE Trans on Cog. & Dev. Systems.

Conference Chair: Local Arrangement (ASRU 2019), Publicity (HAI 2016 HAI 2019), General Secretary (ITD Forum 2016), Session Chair (various conferences).

PC Member (ICIS, IJCAI), Reviewer for top robotics publications (T-RO, Nature Intelligent Machine, RA-L, RAS, ICRA and IROS etc).

RECENT INVITED
TALKS

2018 Chongqing Int'l Talent Innovation and Entrepreneurship Conference, Nov 2018
 Conference on Overseas Chinese Pioneering and Developping in China, July 2018
 AI and Robotics Industry Development Forum, ROC (Taiwan), Jun 2018
 National Cheng Kung University, ROC (Taiwan), Jun 2018
 Tajen University, ROC (Taiwan), Jun 2018
 CPDD, Ministry of Education, Singapore, May 2018
 CPO, Ministry of Education, Singapore, Nov 2017
 Convention on Exchange of Overseas Talents, Ministry of Education, China, Dec 2016
 BoZhon Precision Co. Ltd, China, Aug 2016
 Workshop on Intelligent Technology of Collaborative Robot: Frontier & Challenges, China, Aug 2016