

Ruohan Wang

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EDUCATION

Imperial College London 2016 – 2020

Ph.D in Machine Learning

- Advisors: Prof. Yiannis Demiris, Dr. Carlo Ciliberto
- Thesis: Towards Human-Centered AI: Learning from Demonstration and Meta-learning for Model Adaptation

National University of Singapore 2008 – 2012

B.S. (First Class Honors) in Computer Science

- Advisor: Prof. Seth Gilbert
- Thesis: Randomized Gossip Protocol: Push then Pull
- University Scholars Program, a cross-disciplinary academic program for top students

EXPERIENCES

University College London 2020 – Present

Postdoctoral Researcher

- Mentor: Prof. Massimiliano Pontil
- Design new task similarity measures for better knowledge transfer in conditional meta-learning

Amazon Web Services Aug. – Nov. 2020

Applied Science Intern

- Mentor: Dr. Cedric Archambeau
- Design model ensemble strategy with hyperparameter optimization for Auto ML

Agency for Science, Technology and Research Singapore 2015 – 2016

Research Associate

- Designed new imitation learning algorithms for kinesthetic teaching

Merrill Lynch 2014 – 2015

Software Engineer

Barclays 2012 – 2014

Software Engineer

PROJECTS

A Closed-Loop Multi-sensory BCI for Enhanced Decision Accuracy 2017 – 2020

- MURI Project. Developed algorithms and experiments for personalized cognitive load monitoring

Mojing, a Search Engine for Cosmetic Product 2011 – 2013

- Co-founded a AI-powered search engine for cosmetic products. Developed the web service

TECHNICAL SKILLS

Languages: Python, Java, C++, L^AT_EX, Matlab

Frameworks and Tools: Tensorflow, PyTorch, AWS tools, Unreal Engine, Git

PUBLICATIONS

1. R Wang, Y Demiris, C Ciliberto, **Structured Prediction for Conditional Meta-Learning**, Conference on Neural Information Processing Systems 2020
2. PV Amadori, T Fischer, R Wang, Y Demiris, **Decision Anticipation for Driving Assistance Systems**, International Conference on Intelligent Transportation Systems 2020
3. R Wang, C Ciliberto, PV Amadori, Y Demiris, **Random Expert Distillation: Imitation Learning via Expert Policy Support Estimation**, International Conference on Machine Learning 2019
4. R Wang, C Ciliberto, PV Amadori, Y Demiris, **Support-guided Adversarial Imitation Learning**, LIRE Workshop, Conference on Neural Information Processing Systems 2019
5. R Wang, PV Amadori, Y Demiris, **Real-Time Workload Classification during Driving using HyperNetworks**, International Conference on Intelligent Robots and Systems 2018

6. Y Wu, R Wang, LF D'Haro, RE Banchs, KP Tee **Multi-modal Robot Apprenticeship: Imitation Learning using Linearly Decayed DMP+ in a Human-Robot Dialogue System**, International Conference on Intelligent Robots and Systems 2018
7. R Wang, A Cully, HJ Chang, Y Demiris. **MAGAN: Margin Adaptation for Generative Adversarial Networks**, arXiv:1704.03817 2017
8. R Wang, Y Wu, WL Chan, KP Tee. **Dynamic Movement Primitives Plus: for Enhanced Reproduction Quality and Efficient Trajectory Modification Using Truncated Kernels and Local Biases**, International Conference on Intelligent Robots and Systems 2016

AWARDS/HONORS

Singapore National Science Scholarship (Ph.D)
University Scholars Program President's Honor Roll
Undergraduate full scholarship
\$10,000 startup grant for a vertical search engine
National Olympiad in Informatics Silver Medal
National Software Competition Third Place

SERVICES

Reviewing:

- Journals: RA-L(IEEE).
- Conferences: NeurIPS, AISTATS, ICRA.