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
Jul. 2020 – Sep. 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++, LaTeX, 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.