

2022 UQ Workshop on Artificial Intelligence

Workshop Program Day One – Monday 31 October 2022

Zoom - <https://uqz.zoom.us/j/83779804758>



Time	Session	Speakers	Location
09:00	Registration		Hawken 50-T203
09:30	Welcome	A/Prof. Marcus Gallagher Prof. Shazia Sadiq Prof. Mark Blows	Hawken 50-T203
10:00	Keynote: Artificial Intelligence in 2022	A/Prof. Marcus Gallagher Dr. Archie Chapman	Hawken 50-T203
10:30	Morning Tea		Hawken
11:00	Session 1 – Chaired by Dr. Archie Chapman		Hawken 50-T203
	AI assisted label generation – Using deep active learning for abdominal MRI organ segmentation.	Xincheng Ye	
	Generating Sign Language with AI: A Proposal	Dr. Jessica Korte	
	What psychological biases make it hard to work on AI alignment, robustness, and interpretability	Dr. Michael Noetel	
	Deep Learning computing facilities at UQ	Dr. Shekhar Chandra	
	Poster Spotlight presentations	Dr. Archie Chapman	
12:30	Lunch & Poster Session		Liveris 46-342/343
14:00	Session 2 – Chaired by Prof. Brian Lovell		Hawken 50-T203
	Generating targeted data-driven benchmark optimisation problems	A/Prof. Marcus Gallagher	
	Estimating a Classifier from Training Data with Missing or Noisy Labels of Class Membership	Geoff McLachlan	
	Knowledge Distillation for Model Compression	Aninda Saha	
	Social Face Recognition	Prof. Brian Lovell	
15:20	Afternoon Tea		Hawken
15:50	Session 3		Hawken 50-T203
	Efficient Cell Labelling for Gram Stain WSIs	Sarah Alhammad	
	DDMut: predicting mutation effects on protein stability using deep learning	Yunzhuo Zhou	
	Predicting toxicity of a protein from its primary sequence	Vladimir Morozov	
16:50	Networking & Drinks	Venue: Advance Engineering Building (49) Level 5 Balcony	
17:50	Day 1 Concludes		

Thanks for support from

2022 UQ Workshop on Artificial Intelligence

Workshop Program Day Two – Tuesday 1 November 2022

Zoom - <https://uqz.zoom.us/j/83779804758>



Time	Session	Speakers	Location
09:20	Session 4		Hawken 50-T203
	Artificial Intelligence in Evidence-based Medicine: Challenges and Opportunities	Prof. Xue Li	
	Developing a browser-based deployment framework for medical imaging AI models	Thuy T Dao	
	The Place of Charterparties in Autonomous Shipping: Are They Already Dead or Still in Coma?	Kenneth Ugwuokpe	
	Data Preparation for AI with the Help of Novice Human Workers	Shaochen Yu	
10:40	Morning Tea		Hawken
11:10	Session 5		Hawken 50-T203
	Decoding Cosmic Structure with Neural Networks	Matthew Craigie	
	Undersampled MRI Reconstruction with Side Information-Guided Normalisation	Xinwen Liu	
	Astronomical Imaging and Hardware Design with Differentiable Optical Models	Dr. Benjamin Pope	
	When AI Meets Agriculture	Zijian Wang	
12:30	Lunch & Poster Session		Liveris 46-342/343
13:30	Panel Discussion Prof. Janet Wiles (Computer Science and Social Robotics) Dr. Ian Wood (Statistics) Prof. Paul Henman (Social Science) A/Prof. Marcus Gallagher (Computer Science)		Hawken 50-T203
15:00	Workshop Closing & Prizes		Hawken 50-T203
15:30	Afternoon Tea		Hawken
16:00	Day 2 Concludes		

Thanks for support from:



Poster Presentations

Title	Researcher/s
Modelling Resilience to Distribution Shifts	Samual J MacDonald (CIRES)*
Causal Inference under Runtime Domain Corruption	Hechuan Wen (The University of Queensland)*; Tong Chen (The University of Queensland); LiKheng Chai (Health and Wellbeing Queensland); Shazia Sadiq (The Unviersity of Queensland); Hongzhi Yin (The University of Queensland)
Modularity and Temporal Specificity in Neural Networks	Humphrey J Munn (The University of Queensland)*
A Behavioural Analysis of Metadata Use in Evaluating the Quality of Repurposed Data	Hui Zhou (UQ)*
Protecting AI-generated works in Indonesia: Compatibility with Copyright Law	Laurensia Andrini (University of Queensland)*
Differentiable Context Graph Search for Large-scale Entity Alignment	Bing Liu (The University of Queensland); Yilun Liu (The University of Queensland)*; Wen Hua (The University of Queensland) Semantics Disentangling for Generalized Zero-Shot Learning Zhi Chen (The University of Queensland)*
Machine Unlearning for Image Retrieval: A Generative Scrubbing Approach	Peng-Fei Zhang (University of Queensland)*
A Polynomial-time Decentralised Algorithm for Coordinated Management of Multiple Intersections	Archie C Chapman (The University of Queensland)*
Towards Multi-Task Multi-Agent Reinforcement Learning with Dynamic Selective Transformers	Haodong Hong (The University of Queensland)*
Improved Feature Distillation via Projector Ensemble	Yudong Chen (The University of Queensland)*
Conditional Extreme Value Theory for Open Set Video Domain Adaptation	Zhuoxiao Chen (University of Queensland)*
Step by step: A hierarchical framework for multi-hop knowledge graph reasoning with reinforcement learning	Anjie Zhu (The University of Queensland)*
IdleViT: Efficient Vision Transformer via Token Idle and Token Cut	Xuwei Xu (The University of Queensland)*
Semantic Segmentation of Remote Sensing Images	Yiyun Zhang (The University of Queensland)
Uncertainty in Deep Learning	Chaoyi Li (University of Queensland)*
Domain Generalization	Kaiyu Guo (University of Queensland)
Efficient block contrastive learning via parameter-free meta-node approximation	Gayan K. Kulatilleke, Marius Portmann, Shekhar S. Chandra