Joint UKRI CDT Conference

in

Artificial Intelligence, Machine Learning & Advanced Computing Interactive Artificial Intelligence / Practice-Oriented Artificial Intelligence

24 - 25th June 2025

Tuesday 24 th June		
Academic talks 30mins plus 5mins questions / Students talks 15mins plus 5mins for questions		
AI across domains		
9:45	Registration and Welcome	
9:55	David Walters (Met Office) – AI in weather prediction	
10:30	Michalis Smyrnakis (Hartree) – AI for Diverse Applications from Industry and Public Sector	
11:05	Break	
AI in Health/Algorithms		
11:25	James Cussen (Bristol) – Using expert knowledge when learning causal DAGs	
12:00	Rhiannon Owen (Bangor) – Empathetic design in dementia care	
12:20	Luke Golby (Swansea) – Identifying and assessing miRNA adjuvant-therapies for drug- resistant cancer treatment	
12:40	Natalia Sikora (Swansea) – ColonScopeX: Leveraging explainable expert systems with multimodal data for improved early diagnosis of colorectal cancer	
13:00	Lunch	
AI Algorithms		
14:00	Alex Davies (Bristol): Intro to Graph Neural Networks	
14:35	Matthew Powell (Cardiff) – Configuring Role-Based Stance Detection across open and closed weighted LLMs,	
14:55	Chanju Park (Swansea) – Hyperparameter tuning based on the dynamics of eigenvalues during stochastic gradient descent updates	
15:15	Zara Siddique (Cardiff) – Shifting Perspectives: Steering Vectors to Reduce Bias in LLMs	
15:35	Break	
15:55	Diaa Eddin Habibi (Swansea) – Diffusion Models and Lattice Field Theory	
16:30	Will Robinson (Aberystwyth) – Traps and Pitfalls of Generative AI in Software Research	
16:50	Close	









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Al in Science		
09:00	Christoph Weniger (Amsterdam) – European Coalition for AI in Fundamental Physics and the Dark Universe	
09:35	Thomas Rintoul (Cardiff)- Cosmological Simulations of ram pressure stripping of satellite galaxies	
09:55	Tanya Kushwahaa (Cardiff) – Machine Learning for Classifying AGB Stars in Gaia DR3	
10:15	Jeronimo Segal (Bristol) – Fast Machine Learning Algorithms for data selection at the LHC	
10:35	Break	
AI in Society		
10:55	Aled Lloyd Owen (Southampton) – Responsible AI UK	
11:30	Stephanie Ferry (Welsh Government) – Cyber Leadership in Wales	
11:50	Leena Sarah Farhat (Bangor) – Towards a Universal Translator for Survey Science	
12:10	Glory Ogbonda (Bangor) – "EmployODR", an Al-enhanced system for recommending online dispute resolution	
12:30	Lunch	
Al in Science		
13:30	Arron Lacey (Swansea) – AI and data science in health care	
14:05	Grant Stevens (Bristol) – Stable diffusion for in-painting galaxies as a form of AGN classification with Euclid observation	
14:40	Sony Malhortra (STFC) – Automated deep learning based filtering of particle images in single particle cryoEM	
15:15	Break	
AI in Scientific Research		
15:45	Enrico Rinaldi (Quantinuum) Quantum computing and Al	
16:20	David Barton (Bristol) – Scientific machine learning	
16:55	Karl Harrison (DiRAC) – AI engineering for research with the Dawn supercomputer	











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From Academic Research to Industry		
17:30	Cory Thomas (Aber) – Experiences as a CDT student	
17:50	Panel Discussion	
19:30	Evening Meal – Radisson Restaurant	











Swansea University Prifysgol Abertawe