

**School of Computer Science**  
**Research Students' Public Presentations Schedule (v2.0)**  
**15<sup>th</sup>, 16<sup>th</sup> and 17<sup>th</sup> April 2024**  
**IT125G, Computer Science Building**

**Monday, 15<sup>th</sup> April 2024**

Name	Monday 15 <sup>th</sup> April	Presentation Titles	Chair
<b>10:00 Welcome Address by Head of School of Computer Science, Profession Michael Madden</b>			
<b>Alexandru Martin Locodi</b>	10:15	<i>Controlling the game: a look at interesting graph topologies in spatial evolutionary game theory</i>	<b>Adrian Clear</b>
<b>Sai Abinesh Natarajan</b>	10:30	<i>Game Engine Based Synthetic Data Generation Schemes and Convolutional Neural Networks</i>	
<b>Irish Senthilkumar</b>	10:45	<i>A Cell-Based and AI-Accelerated Computational Framework for the Prediction of Mechanosensitive Tumour Growth</i>	
<b>Michael Gian Gonzales</b>	11:00	<i>Joint Speech-Text Embeddings for Multitask Speech Processing</i>	
<b>Timothy Hanley</b>	11:15	<i>A Machine Learning Approach to MP4 Compression Artefact Removal for Simulated Time Events</i>	
<b>BREAK 11:30 - 11:45</b>			
<b>Sumana Biswas</b>	11:45	<i>Multimodal Sentiment Analysis of Social Media Data</i>	<b>Attracta Brennan</b>
<b>Bentolhoda (Hoda) Binaei</b>	12:00	<i>Abductive Reasoning with LLMs about Incomplete Audio Data</i>	
<b>Gearóid Reilly</b>	12:15	<i>Multiuser Social Virtual Reality to Facilitate Social Interaction for People Living with Dementia</i>	
<b>Michael Duignan</b>	12:30	<i>Ransomware Detection using Machine Learning</i>	
<b>Xue Yang</b>	12:45	<i>Out of Distribution Detection for Reinforcement Learning</i>	
<b>LUNCH 13:00 – 14:00</b>			
<b>Ilas Faiud</b>	14:00	<i>Agent-Based Modeling Approach for Simulating Solar PV Adoption: A Case Study of Irish Dairy Farms</i>	<b>Ihsan Ullah</b>
<b>Jonaid Shianifar</b>	14:15	<i>Multi-Objective Reinforcement Learning for Adaptive Robotic Arm Control</i>	
<b>Rashiduddin Yoldash</b>	14:30	<i>Predictive Security Analytics Platform with Data Governance for Financial Crimes.</i>	
<b>Zixian Zhang</b>	14:45	<i>AI-Driven Approaches to Code Similarity Measurement</i>	
<b>Louise McCormack</b>	15:00	<i>Evaluating &amp; Scoring Trustworthy AI</i>	
<b>BREAK 15:15 – 15:30</b>			
<b>Malaika Mushtaq</b>	15:30	<i>Explainable light weight neural networks after knowledge distillation</i>	<b>Patrick Mannion</b>
<b>Hazrat Bilal</b>	15:45	<i>Automated Retinal Disease Detection and Diagnosis</i>	
<b>Kavach Dheer</b>	16:00	<i>Sensing Emotions to more personalized Recommendations</i>	

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**Tuesday, 16<sup>th</sup> April 2024**

Name	Tuesday 16 <sup>th</sup> April	Presentation Titles	Chair
Kevin Derrane	09:30	<i>Applying machine learning towards mitigating cold starts and efficient management and allocation of resources in serverless computing environments</i>	<b>Karl Mason</b>
Seán Caulfield Curley	09:45	<i>Creation of a synthetic population for small areas in Ireland using microsimulation</i>	
Kulsoom Umay	10:00	<i>Automated Disease Detection Using Machine Learning with Radiology Reports</i>	
Junlin Lu	10:15	<i>Conquering the Frontier: Tackling Hard-Exploration Challenges in Multi-objective Reinforcement Learning</i>	
Evan O'Riordan	10:30	<i>On the Emergence of Fairness in Evolutionary Games</i>	
Mian Ibad Ali Shah	10:45	<i>Peer-to-Peer Energy Trading in Dairy Farms using Multi-Agent Systems</i>	
<b>BREAK 11:00 - 11:15</b>			
Kouider Chadli	11:15	<i>Responsible DevOps of Machine Learning Enabled Systems (REMEDY)</i>	<b>Bharathi Chakravarthi</b>
Rana Zeeshan	11:30	<i>Pursuit of Digital Innovation in Psychiatric Data-Handling Practices in Irish Mental Health Services</i>	
Muzhaffar Hazman	11:45	<i>Analysing User-Generated Multimodal Memes in an Online Social Media Context</i>	
Maziar Kanani	12:00	<i>Grammatical Structure and Grammatical Variations in Non-Metric Music</i>	
Allassan Tchangmena A Nken	12:15	<i>Multimodal Federated Learning Approach for Human Activity Recognition in Privacy Preserving Videos (FLARE)</i>	
Dost Muhammad	12:30	<i>Evaluating Explainable AI Methods for Medical Image Processing: How Can the Explainability Be Enhanced?</i>	
<b>LUNCH 12:45 – 13:45</b>			
Nawazish Ali	13:45	<i>Reinforcement Learning for Battery Management in Dairy Farming</i>	<b>Karen Young</b>
Michael Joseph McMahon	14:00	<i>A Novel Open BCI Mobile Framework for Motor Cortex EEG Signal Classification utilizing TensorFlow Lite</i>	
Iqra Nosheen	14:15	<i>Virtual Reality for Robust Deep Learning in the Real World</i>	
Durre Zehra Syeda	14:30	<i>Prediction and Longitudinal Visualization of Malware Evolution Using Artificial Intelligence</i>	
Damian Wlodarczyk	14:45	<i>Integrating Unmanned Aerial Vehicles and Space-Air-Ground Communications to Enhance Emergency Response Strategies</i>	

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**Wednesday, 17<sup>th</sup> April 2024**

Name	Wednesday 17 <sup>th</sup> April	Presentation Titles	Chair
Aaron Flanagan	14:00	<i>Machine &amp; Deep Learning for Raman and NIR Spectroscopy</i>	<b>Matthias Nickles</b>
Jiaolin Luo	14:15	<i>Reclaiming Quantization Residual Knowledge</i>	
Muhammad Asad	14:30	<i>Beyond the Known: Adversarial Autoencoders in Novelty Detection</i>	
Muhammad Adeel Hafeez	14:45	<i>From Vision to Precision: Refining Depth Estimation for Autonomous Vehicles</i>	
Ayman Abaid	15:00	<i>Deep Learning for Cardiovascular Medical Image Processing</i>	
Kevlyn Stanly Kadamala	15:15	<i>Enhancing HVAC Control Efficiency: Transfer Learning Approaches</i>	
<b>Break 15:30 - 15:45</b>			
Ethan Padden	15:45	<i>Neutrality in genetic algorithms</i>	<b>James McDermott</b>
Hossein Khaleghy	16:00	<i>An Agent Based Approach to Irish Dairy Farm Electricity Consumption Modeling</i>	
Kevin O'Brien	16:15	<i>A framework for multi-agent algorithmic recourse in normal form games</i>	
Adam Callaghan	16:30	<i>Multi-Objective Evolutionary Reinforcement Learning</i>	
	16:45	<b>Concluding Remarks</b> <b><i>Followed by Pizza and refreshments in the Orbsen Foyer Area</i></b>	