

**School of Computer Science**  
**Research Students' Public Presentations Schedule (V3.0)**  
**9:40-17:00, 28 April 2025 Computer Science Building, Rooms CSB-1007 & CSB-1009**

**Monday, 28<sup>th</sup> April 2025**

Sessions in Room CSB-1007				Sessions in Room CSB-1009			
Name	Day/Date	Presentation Titles	Chair	Name	Day/Date	Presentation Titles	Chair
<b>9:40 Welcome Address – First Session Chair</b>				<b>9:40 Welcome Address – First Session Chair</b>			
Alexandru Martin Locodi	09:45	Controlling the game: a look at interesting graph topologies in spatial evolutionary game theory	<b>Dr Adrian Clear</b>	Kevin O'Brien	09:45	A framework for multi-agent algorithmic recourse in normal form games	<b>Prof Jim Duggan</b>
Ethan Padden	10:00	The Effects of Representation Design and Quantum Principles in Evolutionary Algorithms		Michael Duignan	10:00	Ransomware Detection using Machine Learning and Deep Learning	
Evan O'Riordan	10:15	Dictator Game Trust Networks		Xue Yang	10:15	Demonstration-Guided Continual Reinforcement Learning in Dynamic Environments	
Hossein Khaleghy	10:30	Electricity Disaggregation in Dairy Farms Using Machine Learning Algorithms		Gearóid Reilly	10:30	Multi-user Activity Based Virtual Reality to facilitate social interaction for older adults with and without dementia	
Ilas Faiud	10:45	Modeling Solar PV Adoption in Ireland: An Agent-Based Modelling Approach		Maziar Kanani	10:45	Symbolic Dataset for Non-metric Iranian Classical Music	
Muhammad Adeel Hafeez	11:00	Depth Estimation for Autonomous Vehicles		Rana Zeeshan	11:00	Pursuit of Digital Innovation in Psychiatric Data-Handling Practices in Irish Mental Health Services	
Zixian Zhang	11:15	AI-Driven Approaches to Code Similarity Measurement		Kevlyn Stanly Kadamala	11:15	Enhancing HVAC Control Efficiency: Transfer Learning Approaches	
		<b>BREAK 11:30 - 11:45</b>				<b>BREAK 11:30 - 11:45</b>	
Mashal Khan	11:45	Enhancing Trust and Reliability in Federated Learning through Resource Optimization and Data Quality Assurance	<b>Dr Karl Mason</b>	Dost Muhammad	11:45	Evaluating Explainable AI Methods for Medical Image Processing: How Can the Explainability Be Enhanced and Evaluated?	<b>Dr Patrick Mannion</b>
Seán Caulfield Curley	12:00	Microsimulation for Ireland		Eléa Thuilier	12:00	Virtual rehabilitation using Augmented Reality (AR) Exergames for Osteoporosis: a Clinical Trial	
Damian Wlodarczyk	12:15	Enhancing Traffic Rerouting in Disaster Scenarios Using Unmanned Aerial Vehicles: A Grammar-Guided Genetic Programming Approach		Malaika Mushtaq	12:15	Explainable Lightweight Neural Network Architectures	

Hazrat Bilal	12:30	Automated Retinal Disease Detection and Diagnosis		Adam Callaghan	12:30	Extending Evolution-Guided Policy Gradient Learning Into The Multi-Objective Domain	
Michael Gian Gonzales	12:45	On-Device Neural Speech Processing for Consumer Devices		Aaron Flanagan	12:45	Acquisition and Analysis of Raman Spectral Data	
Durre Zehra Syeda	13:00	Prediction and Longitudinal Visualisation of Malware Evolution Using Artificial Intelligence		Mian Ibad Ali Shah	13:00	Multi Agent Reinforcement Learning enabled Peer to Peer Energy Trading in Dairy Farms	
		LUNCH 13:15 – 14:00				LUNCH 13:15 – 14:00	
Kazim Hussain	14:00	Strategic Insights into AI Business Models: Examining the Application Framework Concept in the Irish Context	Dr James McDermott	Timothy Hanley	14:00	Synthesising Microsaccades in Time Events	Dr Bharathi Chakravarthi
Asena Isik Gurhan	14:15	Redefining Novel DNA Functional Archetypes Through AI Design and Expanded Nucleotide Alphabets		Kouider Chadli	14:15	Responsible DevOps of Machine Learning Enabled Systems	
Alamgir Qazi	14:30	When retrieval outperforms generation: Dense evidence retrieval for scalable fake news detection		Nawazish Ali	14:30	Exploring Proximal Policy Optimization for Load Scheduling in Dairy Farms	
Allasan Tchangmena A Nken	14:45	Multi-Modal Federated Learning for Human Activity Recognition on Privacy Preserving Videos		Rodrigo Goncalves Leite	14:45	Knowledge Graph-Based Strategies for Smart Residential Microgrids	
Kavach Dheer	15:00	Transformer-Enhanced Collaborative Filtering for Next-Gen Recommendations		Iqra Nosheen	15:00	Virtual Reality for Robust Deep Learning in the Real World	
		BREAK 15:15 – 15:30				BREAK 15:15 – 15:30	
Ayman Abaid	15:30	Deep Learning for Cardiovascular Medical Imaging	Dr Nazre Batool	Rory Sweeney	15:30	Genetic programming for interpretable models of wastewater treatment plant data	Dr Joe Lemley
Kevin Derrane	15:45	?		Umay Kulsoom	15:45	Explainable NLP for Clinical Text Analysis	
Louise McCormack	16:00	Trustworthy Artificial Intelligence Evaluation		Jonaid Shianifar	16:00	Multi-Objective Reinforcement Learning for Adaptive Robotic Arm Control	
Muhammad Asad	16:15	Out-of-Distribution (OOD) Object Detection for Autonomous Vehicles		Irish Senthilkumar	16:15	An agent-based artificial intelligence-driven 3D deformable cell framework to investigate mechanisms underlying mechanosensitive tumour growth	
POST-GRC GATHERING – SULT (COLLEGE BAR)							