

List of Funded Projects for MRF2024

Reference No.	Project Title	Principal Investigator	Affiliated University	Project Duration (Months)
CHU-24003	AI-based multi-term crowd counting and prediction for MTR	Prof. Wanli OUYANG	The Chinese University of Hong Kong	36
CIT-24011	Making use of the through-draught to design thermal preference-based metro carriages with lower energy consumption	Prof. Zhang John LIN	The City University of Hong Kong	36
PTU-24003	A lifecycle-based resilience analysis framework for MTR system under unforeseeable disruptive events	Prof. Anthony CHEN	The Hong Kong Polytechnic University	36
PTU-24016	Joint Optimization of Train Scheduling, Flexible Train Composition, and Seat Allocation with Extra-long Trains for High-speed Railway Corridors	Dr Wei LIU	The Hong Kong Polytechnic University	36
PTU-24019	Enhancing Rail Resilience with Cellulosic Zinc-Ion Batteries: A Sustainable Energy Storage Solution for Future Railway Systems	Dr Jimin FU	The Hong Kong Polytechnic University	36
PTU-24028	Integrated Electrochemical H ₂ O ₂ Production Platform for On-Site Air Purification in Hong Kong's MTR	Dr Xiao ZHANG	The Hong Kong Polytechnic University	36
PTU-24034	Integrating Big Data Analysis and Dynamic Cooling Technologies for Thermal Comfort Optimization in Metro Stations and Urban Transit Interfaces	Prof. Jianlei NIU	The Hong Kong Polytechnic University	36
UST-24007	Coordinated Autonomy: Enhancing Urban Light Rail Systems Through Multi-Agent Reinforcement Learning	Prof. Ling PAN	The Hong Kong University of Science and Technology	36