Dean's Award for Outstanding Achievement in Research Funding 2025

(Complete List of Projects)

Awardee (Dept)	Allocation Date	Project Title (Funding Scheme)
Prof. Vivien LU (BEEE)	1 Jul 2023	Development of a Novel Solar PV/T Structure with Built-in Non-Uniform EEPCM Heat Storage Units for Smart Cooling of Solar PV Modules *(RGC General Research Fund)*
	8 Jan 2024	Subambient Daytime Radiative Cooling Coating for Energy-Efficient Building Envelope *(RGC Collaborative Research Fund)*
	1 Jul 2024	Enhanced Passive Cooling of Solar PV Module by Atmospheric Water Sorption-Evaporation through a Robust Soft Matter Composite *(RGC General Research Fund)*
Prof. Cheuk Ming MAK (BEEE)	1 Jul 2022	Development of an intelligent auto-grading system for the soundscape of road traffic noise using deep learning *(RGC General Research Fund)*
	1 Jul 2023	Development of Particle Image Velocimetry-fast simulation (PIV-FS) framework for restoring global dental service during COVID-19 pandemic *(RGC General Research Fund)*
	1 Jul 2024	Development of Smart Wellbeing-driven Innovative Forecasting Technology (SWIFT) for mechanically ventilated environments using deep-learning-based spatial-acoustic imaging *(RGC General Research Fund)*
Prof. Wen YI (BRE)	1 Jul 2022	Optimal Subsidy Plan for Local Prefabrication Factory Deployment: Maximizing Local Prefabricated Product Usage and Minimizing Transport Emissions *(RGC Early Career Scheme)*
	1 Jul 2023	Optimizing Staggered Work-Rest Schedule for Construction Workers: Maximizing Construction Labor Productivity and Minimizing Workplace Contact *(RGC General Research Fund)*
	1 Jul 2024	Optimal Deployment of Modular Construction Hubs in High-density Cities: Minimizing Logistics Costs and Minimizing Transport Emissions *(RGC General Research Fund)*

Prof. Anthony CHEN (CEE)	1 Jul 2022	Tailoring next-generation travel demand models for future transportation systems with emerging technologies ***(RGC General Research Fund)***
	22 Dec 2023	An AI-enabled Geospatial Platform for Smart Facility Management and Smart Mobility of People with Disabilities (PwDs) – (CEE-1) ***(RGC Research Impact Fund)***
	1 Jul 2024	Exponentiated Random Utility Model: From Individual Travel Choices to Network Equilibrium Analysis of Transportation Systems ***(RGC General Research Fund)***
Prof. Huan-Feng DUAN (CEE)	1 Jul 2022	Transient air-water flows and wave-fluid interactions in viscoelastic pipelines in water supply system ***(RGC General Research Fund)***
	11 Nov 2022	Investigation of Rainstorm−Storm Surge Joint Occurrence Pattern and Induced Flooding Risk Assessment in Coastal Cities within the Greater Bay Area (GBA) ***(NSFC/RGC Joint Research Scheme)***
	13 Jul 2023	INTACT: Intelligent tropical-storm-resilient system for coastal cities (CEE-4) ***(RGC Theme-based Research Scheme)***
Prof. Yuhong WANG (CEE)	1 Jul 2023	Impacts of nanoscale physicochemical properties of asphalt binders on their fatigue and fracture behaviors ***(RGC General Research Fund)***
	4 Jan 2024	Improving the health and stability of roadside trees in compact urban development through novel road systems and tree root "training" ***(RGC Collaborative Research Fund)***
Prof. Yong XIA (CEE)	1 Jul 2022	Intelligent Knowledge Transfer for Damage Identification of Steel Structures Using Vibration Data ***(RGC General Research Fund)***
	4 Jan 2024	Towards future climate-resilient sea-crossing bridges via intelligent learning of long-term real monitoring data ***(RGC Collaborative Research Fund)***

Prof. Songye ZHU (CEE)	22 Dec 2023	Digital twin-enabled intelligent assessment and maintenance of offshore wind turbine structures in a life-cycle context *(RGC Research Impact Fund)*
	1 Jul 2024	Novel Latched Tuned Mass Dampers for Vibration Control of Flexible Structures with Ultra-low Frequencies *(RGC General Research Fund)*
Prof. Yi JIANG (CEE)	1 Jul 2022	Polyelectrolyte Nanofiltration Membranes via Aerosol-assisted Printing: Establishing Fabrication-Structure-Performance Relationships towards Scalable Manufacturing and Applications in Advanced Water and Wastewater Treatment *(RGC General Research Fund)*
	1 Jul 2023	Enhancing and Sustaining Zerovalent Iron Reactivity for Arsenic Removal in a Magnetic Confinement-enabled Flow-through Water Treatment System *(RGC General Research Fund)*
	1 Jul 2024	Catalytically Reconstructed Covalent Organic Framework Membranes for Water Purification *(RGC General Research Fund)*
Prof. Wei MA (CEE)	7 Feb 2022	Development and Deployment of an AI-enabled Parking Vacancy Prediction Framework using Multi-source Data *(Smart Traffic Fund)*
	1 Jul 2022	Overcoming the Underdetermination: Estimation of Dynamic Origin-Destination Demands on the Link and Bathtub-based Road Network with Multi-Source Data *(RGC General Research Fund)*
	1 Jul 2024	Network-wide Traffic Flow Estimation with Sparse Volume Detectors and Global Open Multi-Source Data: An Integrated Data-driven and Model-based Method on Computational Graphs *(RGC General Research Fund)*
	29 Nov 2024	Parking Garage Vacancy Prediction Services in Hong Kong: AI-enabled Solutions for Enhanced Reliability and Extensibility *(Smart Traffic Fund)*

Prof. Jing-Hua WANG (CEE)	5 Jan 2023	Coastal Urban Flooding under Climate Change: Evolution Mechanisms and Intelligent Analysis (CEE-2) *(RGC Young Collaborative Research Grant)*
	10 Nov 2023	Develop Next-generation Typhoon-resistant Deep-sea Offshore Floating Hybrid Wind-wave Energy Converters: From Coupling Load Mechanism to Vibration Mitigation Technology (CEE-1) *(NSFC/RGC Collaborative Research Scheme)*
	1 Jul 2024	Unveil the Mystery of Coastal Rogue Waves: Spatiotemporal Evolution Mechanisms and Predictions *(RGC General Research Fund)*
Prof. Charles WONG (LSGI)	28 Jan 2022	A multi-source remote sensing based technique for monitoring oil spills *(Environment and Conservation Fund)*
	1 Jul 2023	Retrieval of Aerosol Optical Thickness using Himawari AHI satellite images under cloud-free and cloudy conditions *(RGC General Research Fund)*
	5 Jul 2023	Toward 2060 Carbon Neutrality: Life-cycle Planning and Design of Photovoltaic Integrated Green Roof (PVIGR) Systems for Hong Kong and the Greater Bay Area (LSGI) *(RGC Young Collaborative Research Grant)*
	29 Aug 2024	A study on public transport re-routing with a healthy 'Wait-to-Ride' trip mode for optimizing public transportation routes and improving traffic congestion *(Smart Traffic Fund)*