

Hong Kong Electronics Project Competition 2026

By Ir Benny CHEUNG

The Hong Kong Electronics Project Competition 2026 (HKEPC 2026) was successfully organized to showcase breakthrough engineering designs under the theme "Mastering Artificial Intelligence in the Sustainable Development of Smart". The competition welcomed talented engineering professionals and tertiary students to share their technical expertise and innovative solutions for smart city development. To begin the event, participants presented a diverse array of advanced projects split across the Industry and Tertiary categories, each addressing critical modern urban challenges.

In the Industry category, pioneering entries demonstrated how advanced artificial intelligence can optimize public

safety and infrastructure management. The Champion project, "Smart Fire Services Inspection with AI" by Transcendence Company Limited, highlighted the deployment of intelligent frameworks in critical fire safety inspections. Other industry standouts included the Electrical and Mechanical Services Department's "RopeVision"—which introduced a lightweight AI multi-defect system for the zero-downtime maintenance of lift ropes—and "Light-Guard", an AI-powered autonomous UAV inspection and digital twin system for floodlights.

The Tertiary category featured brilliant, student-led systems designed to enhance community welfare and urban living.

The Hong Kong University of Science and Technology secured the Champion award with "Hive", an intelligent multi-modal fire detection network built for urban resilience. Another key innovation was the "B-SAFE" automated building inspection system by the Hong Kong Institute of Vocational Education (Shatin), which effectively combined large language models with ultra-wideband indoor positioning. Additionally, teams from the City University of Hong Kong and The Hong Kong Polytechnic University contributed sophisticated platforms, including a distributed safety network for hiking trails and a conversational AI framework tailored for sustainable mobility.

In short, the competition highlighted the absolute necessity for the engineering sector to appreciate the uniqueness of

these AI-driven innovations. HKEPC 2026 encouraged participants to first be openminded and stay curious about cross-disciplinary technological integrations. Instead of adhering to rigid, conventional approaches, innovators could try to solve complex infrastructure and mobility problems by utilizing edge computing, predictive systems, and real-time networks to develop a better solution.



Organising Committee, Sponsors and Judges