Excellence and Innovation in the Arts

Institution name	Chinese University of Hong Kong
Submission title or project name	Creating a Major Confluence of the Arts, Artificial Intelligence and Robotics
Nominee/key personnel	Professor YAM Yeung, Research Professor, Department of Mechanical and Automation Engineering, and Director, CUHK Shenzhen Research Institute; Professor MENG Mei-ling, Helen; Patrick Huen Wing Ming Professor of Systems Engineering & Engineering Management, Department of Systems Engineering & Engineering Management
URL	https://www.erg.cuhk.edu.hk/erg/
Submission	CUHK's Faculty of Engineering is creating a major confluence of the Arts, AI and Robotics, and incorporating the work into the first pre-tertiary AI curriculum taught across Hong Kong. We aim to cultivate the next generation of technologically adept and artistically expressive talent. We have developed Chinese Calligraphy and Painting Robots, Oil Painting Robots and Sculpturing Robot. The machines use AI to analyze artistic styles and high-dexterity robotic control to generate artwork with a target style or combined styles. Multi-disciplinary collaborations include: (1) With the Faculty of Education – to create innovative pedagogies for introducing AI and the Arts across Hong Kong's secondary schools. (2) With the CUHK Art Museum – to develop technologies for creating new, digital representations for the Museum's physical treasures – to illuminate the uniqueness of Chinese culture and civilization, and create palpable experiences for enhanced understanding by our community and the world.