

# The 11th Hong Kong University Student Innovation and Entrepreneurship Competition – Award List

Outstanding Organization Award	The Chinese University of Hong Kong
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Innovation			
Grand Prize	CUHK	Next Generation Data Center Interconnects with Integrated Neuromorphic Photonic Processor	WANG Benshan, XIAO Qiarong, XU Tengji, FAN Li, LIU Shaojie

Energy, Environmental and Chemical Engineering			
Award	Institution	Project Name	Name of Participant(s)
First Prize	PolyU	Highly Intergrated Wireless Ultrasonic Motor System for Fully Enclosed Environments	XIE Xiaotian, XUE Zhiwei, DUAN Ye
Second Prize	CityU	Industrial Approach to Cost-Effective Enzyme-Inspired Nanomaterials for Regulating Antibiotic Resistance Bacteria/Genes in Wastewater Treatment with High H2O2 Utilization	CHENG TIANQI, WU XINYU, ZHAO CHAO, CUI YIFAN, XIAO ZHANPING
	CityU	Assessing the Capabilities of TOFD in Identifying Defects in PE Butt Fusion Joint: Revolutionizing Pipeline Safety in Hong Kong	SUTEDJO Avriia
	PolyU	High efficiency inorganic perovskite organic tandem photovoltaic	HAN Yu, Zhang Jiyao, Cheng Lei
Third Prize	HKMU	A self powered wearable electrochemical sensor based on composite conductive hydrogel medium for detection of lactate in human sweat	Sun Jing
	HKU	Flexible Scheduling Strategy of Electric Vehicles Based on V2G Technology Enhancing Renewable Energy Integration and Grid Load Optimization	Li Yicheng, Gao Yu
	CityU	High Performance Perovskite Indoor Photovoltaics Self Sustaining Power Modules for Next Generation IoT Ecosystems	YU Zexin, WANG Yan, GONG Jianqiu

	PolyU	Development and optimization of electrodes with low cost in anion exchange membrane electrolyzers for efficient green hydrogen production	WU Lizhen, WANG Qing, DENG Guangrong, ZHAO Zhihao
Merit Prize	HKUST	A City Scale Building Energy Simulation Platform	Shihong Zhang
	PolyU	Synthesis of Eco Cement Using Waste Glass Powder and Recycled Concrete Fine	KLOSSNER Cleo
	CityU	Experimental study on boiling heat transfer characteristics and bubble dynamics of surfactant aqueous solution	LIANG Jiajun
	HKU	Adaptive Modular Platforms for Climate-Resilient Urbanism	Yang Yiru, Zhou Yiheng
Information Technology			
Award	Institution	Project Name	Name of Participant(s)
First Prize	CUHK	Next Generation Data Center Interconnects with Integrated Neuromorphic Photonic Processor	WANG Benshan, XIAO Qiarong, XU Tengji, FAN Li, LIU Shaojie
Second Prize	CUHK	A Deep Learning Based Web Service for Predicting Small Molecules that Target microRNA mRNA Interactions	XIAO Huan, ZHANG Yihao
	HKUST	Heterogeneous Multi Robot Systems for Intelligent Marine Life Observation	Lin Hin Wang, Wang Pengyu, Zhang Fan, Yim Ying Hing, Du Xiawei, Li Jialu, Kui Ka Yu, Li Chun Kit, Leung Ka Chun
	PolyU	Optimal Transmit Signal Design for Multiple Target Sensing Exploiting Prior Information	YAO Jiayi
Third Prize	CityU	A high performance selenium nanoflake based avalanche photodetector	LIU Handa
	PolyU	Rescue System Based on SkylTE	LI SI JIA, XU YIN HAO, LI XIAO, SIU SUM FU SAMUEL

	HKMU	Smart Glasses for Hearing Impaired in Hong Kong	CHUI Tsz Ching, Lee Chak Yin, YIP On Tik, WU Long Fung Eugene
	PolyU	SMART Orthopaedic Clinic	JIANG Tianshu, YAN Jin, CHAN Lok Chun, LI Ho Hin Toby
Merit Prize	PolyU	DyslexAI	STURM Leo Matthias, Yin Zifu, Ivy, Fung Yik Hei, Ho Tsz Ming, Ko Tsun Ming, Lau Ho Wai Justin
	HKUST	ShepherdStory a Manga Generator with Highly Consistent Looking Characters	Xuelel Peng, HE Pui San
	HKBU	EyeMirror - The First Home Vision Testing Mirror	TANG Canyu, FENG Hoi Lam, WONG Hei Wang, WU Guo, LEE Shiyu, Kwok Tak Ming, ZHENG Wei, CHEN Siqi

## Mathematics and Physics / Mechanics and Control Systems

Award	Institution	Project Name	Name of Participant(s)
First Prize	CUHK	Magnetic Countertraction System for Endoscopic Submucosal Dissection in Gastrointestinal Tract	Chan Wai Shing, Wong Duncan Alexander
Second Prize	CityU	Autonomous Energy Routing and Redistribution Technology for Large Scale Battery Storage Systems with Health Monitoring Capabilities	Zhengqi Wei

	CUHK	Adjusting Tissue Puncture Omnidirectionally In Situ with Pneumatic Rotatable Biopsy Mechanism and Hierarchical Airflow Management in Tortuous Luminal Pathways	LIN Botao
	CUHK	Sea-U-Foil: The World's First Multi-Modal Cross-Domain Marine Vehicle	Zuoquan ZHAO, Ruixin YAN, Bingxin HAN, Wendi DING, Zixuan GUO, Zongzhou WU, Jialiang WANG, Pei WANG
Third Prize	HKUST	Penguin Buddy	Chan King Chung Bryce, Tam Ho Wang, Yu Hiu Lam, Leung Wai Yan, Tam Kwan Yiu
	HKU	Neuromorphic Wavefront Sensor for Instant Large Gradient Optical Field Imaging	Wang Chutian, Chen Jingyan, Tian Yunfei, Chen Rongzhou
	CUHK	A cylindrical Halbach-array-based magnetic actuation system with high actuation forces for various magnetic robots	Sun Hongzhe
	CUHK	Save the small scale crisis in Milky Way with a blue tilted early universe model	Jianhao WU
Merit Prize	HKUST	An Energy-Saving Passive Evaporative Eco-Cooling Paint For buildings in Hong Kong	KWAN Chak Fung Kevin, WONG Wing Yat, LEUNG Pak Hei, HO Yat Cheung
	PolyU	Innovative smart latched control system: from wave energy converter to vibration control	WANG Hao
	HKU	Scalable Machine Vision for Future Smart Cities	Yaping Zhao Juntao QIU
	HKU	Progressive Optimization of SOC Estimation Algorithms for Li-ion Batteries in xEVs Using Deep Neural Networks and Hybrid Architectures	LOU JINGWEN

## Life Sciences

Award	Institution	Project Name	Name of Participant(s)
First Prize	CUHK	Fc engineered CD9 antibodies for blood cancers	Ng Wing Hei
Second Prize	CUHK	Mitochondria-targeted, Single-atom Nanozymes Accelerate Bone Regeneration by Augmenting Skeletal Stem Cell Energy Metabolism	Wang Yuwen, Zhou Zhilong, Cai Runxuan, Liu Jun, He Songlin
	PolyU	Advanced Lung Imaging and Therapy Support System	HUANG Yu Hua, MA Zongrui, XIONG Tianyu
	CUHK	A Worm-like Nucleic Acid Nanostructure for Gene Delivery and Endosomal Escape	XIAO Yu
Third Prize	CUHK	Coacervates Mediated Delivery System for Cancer Therapy	XU Zhiyi, HU Yuke
	HKUST	Cilia enhanced flow steerable magnetic guidewire	CHEN Xi, LIU Xu
	CUHK	AI-Driven Macrophage-Myofibroblast Transition Intervention for Overcoming Immunotherapy Resistance in Lung Cancer	Huang Shujie, Zhang Qi, Ji Zeyuan, Zhou Jue, Yang Guanqun
	CUHK	VIPS A Versatile and Integrated Platform for Spatial omics	WEN Zhenkang, SHAN Zhengming, JIN Zheyu
Merit Prize	HKU	Exploring potential molecular targets for application in immunotherapy for lung cancer	DENG Zifeng, LI Yuanhui, ZHAO Suizi, ZHAO Yinan
	CUHK	Aptamer based Therapeutic Strategy Targeting CT domain of Connective Tissue Growth Factor to Counteract Muscle Fibrosis in Duchenne Muscular Dystrophy	Zhang Huarui, Yao Shanshan, Yu Sifan, Ren Meishen, Yang Xin
	HKBU	An osteoblast-targeted 11-HSD1 inhibitor	Li Nanxi

## Entrepreneurship

Grand Prize	CUHK	RiceFort	Law Yuk Yi, Cheuk Kei Shan, Leong Cheng, Lam Lai Ting Lydia, Cheung Yat Ming
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## Entrepreneurship Proposal

Award	Institution	Project Name	Name of Participant(s)
First Prize	PolyU	Innovative Structure Based IV Type Hydrogen Storage Bottle	Sun Yitian, Ma Yumeng, He Jiarui, Xie Sihao, Wu Yuting, Liu Yueyi, Zhang Yidan, Liu Jingjing, Zhao Jiayi, Deng Kaiyuan, Li Qiuyi, Guo Boyu, Xie Bing
Second Prize	HKU	Event based digital holography for semiconductor production	Chen Jingyan, An ran, Wang Chutian, Tian Yunfei
	PolyU	Next Generation Platinum Alloy Catalysts for Hydrogen Fuel Cells	LI Longyu
	CUHK	Pioneering Phage Precision Therapy to Defeat Superbugs	Fuda XIE, LIN ZHIQIANG, Fengtiejun
Third Prize	PolyU	AI Empowered Digital Twin Platform for Smart Building Management	XU Kan, MA Tianyou, XIAO Ziwei
	PolyU	NeuraFlow	HE Jiarui, MA Yumeng, XIE Sihao, ZHANG Shuyu, YAN Chengtao, LIU Yueyi, YANG Qinglin, BI Jiawei, DENG Zirui, WANG Yichu, GUO Boyu, YANG Zhuo
	PolyU	AI Intelligent One-Stop Exhibition Service Platform	Hu Yawen, Tao Liangjie, LI Jingshu, LI Jiamei
	HKU	ArchiFuture AI	Neo, JINYAO FENG, Li Ziqi
Merit Prize	HKUST	Next Generation of 3D Bioprinting through Multimodule Integrated Platform	LIU Shishuo, WANG Chongrui, YIN Xi, DONG Bin, LUO Yikun, ZENG Ruiyi, ZHANG Zhanjie

	HKBU	NextSight Pioneering the Next Gen Comput Human Revolution with Smart Glasses	TANGMINGMEI
	HSU	Ultrasonic Welding	Chan Kaki, Cheng Hao Ran
	HKU	Mednnect	SU Yuting, CHAN Chun Ki

Startup			
Award	Institution	Project Name	Name of Participant(s)
First Prize	HKUST	Bacbudy Smart Exosuit	LEI Ting
Second Prize	CUHK	Low Carbon Lifestyle with Silica Capsule Technology	Malvin Subroto Pamudji, Cheng Ka Kit
	CityU	Nano Pore Sensing Platform for Single Biomolecules Detection	PAN Tianle, YANG, Jianxin, Hu, Dehua
	CityU	Hopcopter	WANG Fangzheng, DING Runze, LI Song, JIA Ruihan, GUO Zerong, NIE Xiaoling, LAN Yawei, WANG Fangzheng, BAI Songnan
Third Prize	PolyU	Quantitative Rapid Test for At-home Health Management	LIU Wengang, WU Siying, LI Liman
	PolyU	Application of Freez Sugar Natural Honey Powder in Traditional Chinese Health Conscious Desserts and Sweet Soups	WONG LAI KUEN
	HKUST	Multifunctional magnetic guidewire with fingertip feedback	LIU Xu, CHEN Xi, WANG Hong
	HKUST	ice-assisted transfer and cleaning for semiconductors and electronic devices	Liu Haijun, Wang Bodong, Au Sze Ching

Merit Prize	CityU	Intelligent Microfluidic Chip Platform for Regenerative Medicine and Liquid Biopsy Screening	Zhang Linghan, Zou ShangJie, Liao Junchen
	CityU	Microalgae Air Purification and Protection	Tong Travis Ka Hin, Dhruv Manoj Jain, Rehaan Lulla, KHAN Md Muhtasim
	HKU	Harness the ecological service and carbon sequestration via Shellfish farming	SHAIK ABDULLAH NAWABJAN, Deng Xiao
	HKMU	Vita-Sphere Organoid Cell Culture Platform	Zhang Yongchao, Liu Tsam Yi, Wang Xiaolong, Wang Ruixiao, Xiao Junhong

## Social Enterprise /Cultural & Creative Services

Award	Institution	Project Name	Name of Participant(s)
First Prize	CUHK	RiceFort	Law Yuk Yi, Cheuk Kei Shan, Leong Cheng, Lam Lai Ting Lydia, Cheung Yat Ming
Second Prize	PolyU	JAPJAP	Chan Man Wai
	HKUST	Food With Benefits Sustainable Upcycled Food	Yordanov Matey Svetlan, Ka Hei So Francis
	HKU	Saint Novel	LI Cheuk Shuen, Zhang Odin Haotian, Liang Qi
Third Prize	CUHK	ArtInSight	Chung Ho Chun, Lee Pak Nin, Chu Wing Sze Nicola
	HKU	Okara Upcycling with DoDidDust Food	To Man Yiu, Lee Cheuk Lam, Wong Tze Ching, Tsang Ching Nga
	HKUST	Visionary	Yeung Kok Hay Jacky, Leung Tsz Shan, Yeung Yui Sze
	PolyU	Clear Eyes	Feng Lin, Julia, Chen Kaixin, Zhao Zixian



Merit Prize	PolyU	Spatial Intelligence System	Xu Huafeng, Lam Yuen Yik, Cheung Kwok Hei, Bian Muzhi
	CUHK	WriteRight	Wong Tsz Kwan, Yu Chen Xu, Leung Wing Kiu, Liu Yuk Ming, Ho Kelly, Fan Lok Wai
	HKUST	HandsTalk AI Driven Real Time Sign Language Translate App	Lee Cheuk Sum, So Ho Mang Marcus
	HKU	Body Nova Medical Consultancy Services	Kwok Ka Po, Chak Chi Shing