### Press Release For Immediate Release

## <u>Hong Kong will Host APICTA 2023 (Asia Pacific Information and Communications</u> <u>Technology Awards 2023)</u> <u>HKCS led Hong Kong Delegates Won 16 Prizes in APICTA 2022 with 6 Winner Awards</u>

13<sup>th</sup> December, 2022, Hong Kong – Hong Kong Computer Society (HKCS) announced today that Hong Kong will host the annual remarkable event in Asia Pacific region – the Asia Pacific Information and Communications Technology Awards 2023 (APICTA 2023) in 2023. And led by HKCS, after fierce competition amongst 206 entries, Hong Kong delegates won 16 awards in total, with 6 Winner and 10 Merit Awards this year. The ceremony for the handover of the next APICTA host from Pakistan to Hong Kong Special Administrative Region was also held during the awards presentation event.

Dr. Rocky Cheng, President of Hong Kong Computer Society (HKCS), announced: "HKCS, with support from the Office of the Government Chief Information Officer (OGCIO), has bid for and will host APICTA 2023 in Hong Kong by the end of Year 2023, with more details to be announced later. The event has been hailed as the Oscars of the Information and Communication Technology (ICT) industry. Undeniably Hong Kong is at the forefront of ICT field in the Asia Pacific region, and its leading position will be further manifested with APICTA 2023 to be hosted in Hong Kong."

Dr. Cheng explained, "In response to the statement made by Mr. John Lee, the Chief Executive of the Hong Kong Special Administrative Region: 'Business is back in Hong Kong! Hong Kong is on the international stage again!', HKCS is pleased to hold APICTA 2023 to enhance Hong Kong's image as International Events City."

Dr. Cheng pointed out: "This year, a total of 24 selected entries from 18 local organisations, universities and schools, competed in APICTA 2022 held in Islamabad of Pakistan from 7<sup>th</sup> to 11<sup>th</sup> December, 2022 as a hybrid event under the current 'new normal'. HKCS invited, nominated, coached and led the Hong Kong delegates to achieve excellent results again with 6 Winner and 10 Merit Awards, totaling 16 awards, which is another fruitful year for Hong Kong as in last year when we won the highest number of Grand Awards in APICTA 2020-2021 with 6 Winner and 11 Merit Awards."

Hong Kong Winners and Merit Recipients in APICTA 2022:

	Category	Winning Organisation	Product Name
Winner	Big Data	Electrical and Mechanical	Smart City Management - The
		Services Department, Hong	Regional Digital Control
		Kong SAR Government	Centre (RDCC) & AI Platform
Winner	Industrial -	China State Construction	C-Smart All-in-one Smart
	Engineering &	Engineering (Hong Kong)	Construction Integrated
	Construction	Limited	Platform
Winner	IoT	R2C2 Limited	R2C2 ARC
Winner	R&D	FILIX MedTech Limited and	Chinese Medicine Products
		Technological and Higher	Traceability and Verification
		Education Institute of Hong	Platform
		Kong	
Winner	Senior Students	German Swiss International	MRRAED: Mixed Reality
		School	Rehabilitation Activities for
			Elderly with Dementia
Winner	Tertiary Students	The Hong Kong Polytechnic	Mutual Cognitive
		University	Human-Robot Collaborative
			Manufacturing System
Merit	Business Service -	PaySmart Capital Limited	Liquid Corporate Digital
	Security solutions		Verifiable Credentials
Merit	Consumer - Retail and	FILIX MedTech Limited and	Chinese Medicine Products
	Distribution	Technological and Higher	Traceability and Verification
		Education Institute of Hong	Platform
		Kong	
Merit	Inclusions &	Belun Technology Company	Belun® remoVital Monitoring
	Community Services -	Limited	System
	Health and Wellbeing		
Merit	Industrial -	R2C2 Limited	R2C2 ARC
	Engineering &		
	Construction		
Merit	ІоТ	Belun Technology Company	Belun® remoVital Monitoring
		Limited	System
Merit	Public Sector and	Urban Renewal Authority	Centralised Smart Building
	Government -		Monitoring System

	Government &		
	Citizen Services		
Merit	Junior Students	Ju Ching Chu Secondary	Caelus
		School	
Merit	Senior Students	Christian Alliance S W Chan	EMG Rehab System
		Memorial College	
Merit	Tertiary Students	Hong Kong Institute of	Streaming Hub
		Vocational Education (Shatin)	
Merit	Tertiary Students	Hong Kong Institute of	ETBadge
		Vocational Education (Tuen	
		Mun)	

Among those winning products, there are Winners with double honours. Both FILIX MedTech Limited and Technological and Higher Education Institute of Hong Kong and R2C2 Limited have won one Winner Award and one Merit while Belun Technology Company Limited received two Merit awards.

As Executive Committee Member of APICTA, the Hong Kong Computer Society (HKCS) led the Hong Kong delegation comprising 18 local ICT award winners including recipients of the Hong Kong ICT Awards and Youth Innovation Startup Competition. With Mr. Victor Lam, JP, Government Chief Information Officer, the Government of the HKSAR as Honorary Head of Delegation, Mr. Stephen Lau, JP, Secretary General (Honorary) of HKCS as Head of Delegation, Hong Kong's triumph once again reaffirms its standing as a major centre for ICT technology within the Asia Pacific region.

Dr. Cheng said, "APICTA is hailed as the Oscars of the ICT industry. The 18 teams of Hong Kong come from local enterprises and educational institutions; among them, education institutions have received subsidies from OGCIO to participate in the awards. The Hong Kong Trade Development Council (HKTDC) also sponsors a 'Hong Kong Reception' networking event for all the APICTA delegates, local officials and industry experts during the awards each year, providing an international platform for Hong Kong to showcase its entries. Support from the Hong Kong SAR Government and HKTDC is much welcome in Hong Kong's participation in international competitions."

Dr. Cheng also remarked, "APICTA 2022 is hosted by Pakistan this year. 13 teams, among the 18 teams from Hong Kong, have received recognition in APICTA this year, representing a winning percentage of over 72%. I am really delighted that Hong Kong continues to shine on the APICTA stage with this achievement. I convey my warmest congratulations to all of the award winners on behalf of HKCS. Our delegates had to face tough competition vis-à-vis 14 other countries and

territories and meet highly demanding judging criteria. Even Merit recipients must attain 95% or more of the Winners' score to receive the Merit award, so I must say all of the honours are hard-fought and well-deserved."

Dr. Cheng continued, "APICTA serves to promote ICT awareness and stimulate technological innovation in the Asia Pacific region. HKCS has been an Executive Committee Member of this high-profile annual industry event and Hong Kong as one of the member economies since 2001. As the largest and longest-standing ICT professional body in Hong Kong with an in-depth understanding of local ICT industry development, HKCS conducts the nominations and co-ordinates the Hong Kong delegation for the awards. The Society also invites different industry experts to provide mentorship to the nominees, so as to best showcase Hong Kong's technological edge to the judges."

APICTA2022 attracted contestants from Australia, Bangladesh, Brunei, China, Indonesia, Macao SAR, Malaysia, Myanmar, Pakistan, Singapore, Sri Lanka, Thailand, Vietnam, Chinese Taipei and Hong Kong SAR. These member economies take turns hosting the annual awards, and the next awards will be hosted by Hong Kong.

Dr. Cheng explained that with delegates coming from so many different countries and territories across the Asia Pacific, APICTA will continue to provide valuable networking and learning opportunities for delegates and facilitate collaboration to advance ICT development in their respective communities. Members in the judging panel are appointed from the member economies to ensure a fair and impartial selection process and enhance the credibility of the results.

# About the Asia Pacific Information and Communication Technology Alliance Awards (APICTA)

APICTA is an annual flagship event of the ICT industry in the Asia Pacific region. Founded in 2001 by Multimedia Development Corporation in Malaysia, it has become a renowned international award today. APICTA aims to recognise organisations and individuals in the Asia Pacific region who have made a significant contribution to the ICT industry; increase ICT awareness in the community; stimulate ICT innovation; provide opportunities for business matching between IT innovators and investors; and facilitate technology transfer and application.

APICTA is represented by 16 countries and territories across the Asia Pacific region, including: Australia, Bangladesh, Brunei, China, Chinese Taipei, Indonesia, Japan, Hong Kong SAR, Macao SAR, Malaysia, Myanmar, Pakistan, Singapore, Sri Lanka, Thailand and Vietnam. These member economies take turns hosting the annual awards each year, which is won through a bidding process. For more information, please visit <u>www.apicta.org</u>.

Since APICTA was established in 2001, the Hong Kong Computer Society, as the largest and most well-established ICT professional association of its kind with an in-depth understanding of local ICT industry development, has been responsible for nominating Hong Kong's ICT talents to participate in the event.

#### About the Hong Kong Computer Society (HKCS)

Founded in 1970, the Hong Kong Computer Society (HKCS) is a recognised non-profit professional organisation focused on developing Hong Kong's Information Technology (IT) profession and industry. Their members come from a broad spectrum of Hong Kong's IT community, from corporations to like-minded individuals, all coming together to raise the profile and standards of the IT profession and industry. As a well-established IT professional body, the Society is committed to professional and industry development as well as community services to ensure the IT sector continues to make a positive impact on peoples' lives with three main goals, namely, 1) talent cultivation and professional development, 2) industry development and collaboration, and 3) the effective use of IT in our community. For more details, please visit <a href="http://www.hkcs.org.hk">http://www.hkcs.org.hk</a>.

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# Appendix 1: Introduction of Hong Kong Winners 附錄一:香港代表隊大獎得主簡介

• APICTA2	022 Winner 大獎得主	
Category	Big Data	
類別	大數據	
Organization	Electrical and Mechanical Services Department, Hong Kong SAR Government	
得獎者	香港特別行政區政府機電工程署	
Product	Smart City Management - The Regional Digital Control Centre (RDCC) & AI Platform	
得獎產品	智慧城市管理-區域數碼監控中心及人工智能平台	
Description	In response to the Electrical and Mechanical Services Trading Fund - The 2 <sup>nd</sup> 5-year	
產品簡介	Strategic Plan, Electrical and Mechanical Services Department (EMSD) has established	
	the very first RDCC (Regional Digital Control Centre) for E&M digitalisation. The	
	Centre will be responsible for equipment monitoring, indicative alarm for fault	
	responses and energy management, etc. with the ultimate goal to enhance E&M assets'	
	operational efficiency and environmental performance.	
	The E&M systems' status and alarms of various designated and widely dispersed sites	
	are centrally visualized in dashboards at RDCC. Our frontline staffs and engineers are	
	then able to monitor assets at multiple sites remotely and concurrently in centralised	
	dashboards with Daily, Energy and Emergency Modes.	
	Furthermore, by incorporating transferred Big Data and the digital platform at RDCC, Semantic AI techniques can be deployed to standardize building data from various E&M systems into semantic building models for further Big Data analytics and better building management. Building models for different types of buildings can also be replicated quickly for further machine learning and AI applications.	
	The RDCC contributes a solid foundation for intelligent digital management of buildings in a city-wide level.	
	因應機電工程營運基金的第二個五年計劃「機電數碼化」,綜合工程部為機電工程 署設立了第一個區域數碼控制中心。中心主要負責遙距實時監控各個機電設備, 系統以人工智能及大數據應用作出運作維修提示及能源效益管理。中心亦能透過 即時影像監察各個緊急機電設備的狀態及場地現場環境,提升維修人手調配彈 性。區域數碼控制中心最終目標為提升機電設備工作上的效率及能源效益表現。	

區域數碼控制中心系統介面,會集中展示全港九不同場地的機電系統狀態及警示。前線同事,工程師及管理層能夠在控制中心不同模式的中央介面,例如日常模式、 能源模式、災難模式,同時遙距監察多個場地設施的情況。
此外,項目之大數據數碼平台,亦應用了建築語義人工智能系統,把機電系統以統一的標準進行數碼及語義化,解讀大量建築物的機電運作資料的關聯性。當建立了個別建築物的大數據人工智能分析模型後,便可將該語義模型為基礎,快速地複製至其他建築物,加快人工智能在不同建築物的使用。區域數碼監控中心及人工智能平台方案為城市管理數碼化建立穩固基礎。

• APICTA2	022 Winner 大獎得主
Category	Industrial - Engineering & Construction
類別	工業類別-工程及建築
Organization	China State Construction Engineering (Hong Kong) Limited
得獎者	中國建築工程(香港)有限公司
Product	C-Smart All-in-one Smart Construction Integrated Platform
得獎產品	C-Smart 智慧工地管理平台
Description	The traditional management methods used in the construction industry are unable to
產品簡介	achieve refined and effective management. Facing different pain points such as
	complex construction environment, multiple subcontractors and workers, different
	machinery vehicles, complicated workflow and management processes, China State
	Construction (CSHK) has developed C-Smart All-in-one Smart Construction Integrated
	Platform based on ICT, Internet of Things (IoT), sensors, artificial intelligence, cloud
	computing, BIM, and other advanced technologies.
	C-Smart provides customised smart construction solutions for the construction site. All captured data are centralised and integrated into a single platform as a Common Data Environment (CDE) for visualisation and analysis. It allows the site to conduct all-round and comprehensive monitoring during the construction project in terms of workers, safety and environment, quality, progress, materials, etc., thereby providing a more transparent and accurate overview for project managers and stakeholders and realise intelligent management and digitalisation of the construction site, leading the digital transformation and upgrading of the industry.
	CSHK is bullish on the future of C-Smart and believes it has great potential to be adopted by developers and government departments to transform industry practices.

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建築行業傳統的管理方式無法做到精細化、有效化管理。面對施工環境複雜、分判商及工人眾多、機械車輛眾多、工作流程和管理流程複雜等不同痛點,中國建築工程(香港)開發了基於資訊及通訊科技、物聯網、傳感器、人工智能、雲計算、建築信息模擬(BIM)和其他先進技術的「C-Smart 智慧工地管理平台」。
C-Smart 為工地提供定制化的智能施工解決方案。所有取得的數據都集中並集成到一個平台,作為可視化和分析的共用數據環境(CDE)。該平台可令工地在施工 過程中,對工人、安全與環境、品質、進度、工料等進行全方位、全面的監控,從而為項目經理及各持份者提供更透明、更準確的概覽,實現智能化工地管理和數字化,引領行業進行數碼轉型升級。
中國建築工程(香港)看好 C-Smart 的未來,相信它具有很大的潛力,將被發展 商和政府部門採用,以改變行業的一貫運作方式。

• APICTA2	● APICTA2022 Winner 大獎得主		
Category	ІоТ		
類別	物聯網		
Organization	R2C2 Limited		
得獎者	索特機械人有限公司		
Product	R2C2 ARC		
得獎產品	R2C2 人工智能機械人協作系統		
Description	R2C2 ARC system (AI-ROBOT-COLLABORATION) is a universal robot control and		
產品簡介	management platform. The ARC system connects to robots from different		
	manufacturers, providing a seamless experience in robot automation. Users can		
	teleoperate robots, collect visual and sensor data, assign automated robot tasks, deploy		
	AI applications and manage robots' performance and ROI (Return on Investment) with		
	an intuitive user interface.		
	R2C2 ARC system supports outdoor robots, including quadrupedal (four-legged		
	robots), drones, underwater robots, and unmanned ground vehicles, which makes the		
	R2C2 ARC system an all-rounded robotic platform for construction and inspection		
	industries. R2C2 ARC system also supports indoor service robots such as delivery,		
	cleansing, and patrol robots. The R2C2 robot API makes integrating robots with any		
	workflow management applications and platform easy.		
	R2C2 ARC system has been deployed in construction sites, remote geoengineering		
	work sites, public transportation systems, commercial and residential premises to		

perform patrol, inspection, and predictive maintenance. R2C2 ARC has a rapidly growing application ecosystem in AI inspection and workflow integration. We bring cutting-edge AI solutions and enterprise tools to robot applications.

「R2C2 人工智能機械人協作系統」(AI-ROBOT-COLLABORATION,簡稱 ARC) 是一個通用的機器人控制和管理平台。ARC 系統連接到來自不同製造商的機器 人,提供機器人自動化的無縫體驗。用戶可以通過直觀的使用者介面遠端操作機 器人、收集視覺和感測器數據、分配自動化機器人任務、部署人工智慧應用程式 並管理機器人的性能和投資回報率(ROI)。

「R2C2 人工智能機械人協作系統」支援戶外機器人,包括四足機器人、無人機、 水下機器人、無人地面車輛等,使「R2C2 人工智能機械人協作系統」成為建築和 檢測行業的全方位機器人平台。系統還支援送貨、清潔、巡邏機器人等室內服務 機器人。R2C2 機器人 API 使機器人與任何工作流管理應用程式和平台的集成變 得容易。

「R2C2人工智能機械人協作系統」已於工地、遠程工程工地、公共交通系統,商業與住宅場所中,以進行巡邏、檢查和預測性維護。「R2C2人工智能機械人協作系統」在人工智能檢測和工作流程整合方面,擁有快速增長的應用程式生態系統。我們把尖端的人工智能解決方案和企業工具引入機械人的應用。

• APICTA2	022 Winner 大獎得主
Category	R&D
類別	研究及發展
Organization	FILIX MedTech Limited and Technological and Higher Education Institute of Hong
得獎者	Kong
	斐歷醫藥科技有限公司及香港高等教育科技學院
Product	Chinese Medicine Products Traceability and Verification Platform
得獎產品	中藥產品溯源及驗證平台
Description	Depending on the specific use cases, the responsible personnel for each in the supply
產品簡介	chain will use our Web-App/Mobile App to capture the information in a batch of the
	products, like product photos, certification reports and most importantly the NIR
	spectrum representing the quality of the Chinese Medicine products and saved in the
	DLT/Blockchain to provide product provenance. At the consumer level, they can also
	use Web-App/Mobile App to retrieve saved product information and in addition, they
	can use the same mobile NIR sensor to verify the similarity of the product NIR
	spectrum fingerprint with standards.

We are delighted to have young talents from THEi whom equipped with industry knowledge in Chinese Medicines and strong passion joining our team. For our latest project, THEi students helped us to develop machine learning models on near-infrared spectroscopy rapid authentication (NIRSRA) of Chinese Medicines. THEi students can also have opportunity to learn technologies like blockchain and computer vision that can help them to become future-ready professionals.

根據不同應用案例,中藥產品供應鏈的負責人員可使我們的 Web-App 或流動應用 程式,來獲取某一批次的產品信息,例如產品照片、認證報告,而最重要的是代 表該產品質量的 NIR 光譜指紋圖譜,並保存在 DLT/區塊鏈中,以提供產品來源信 息。在消費者/零售層面,他們還可以使用 Web 應用程式/移動應用程式,以取得 所有關於產品的信息,此外,他們還可以使用同一型號的流動 NIR 傳感器來驗證 產品與標準品的相似度。

我們很高興達成和香港高等教育科技學院 (THEi) 的項目合作協議,有來自 THEi 的學生加入我們的團隊,他們具備中醫藥行業專業知識和對創科的熱情。在我們 最新的項目中,THEi 的學生幫助我們開發了中藥近紅外光譜快速鑑定(NIRSRA) 的機器學習模型,以應用在我們方案內。THEi 學生也有機會學習到最新的區塊鏈 和電腦視覺等技術,幫助他們成為面向未來的專業人士。

• APICTA2	022 Winner 大獎得主
Category	Senior Students
類別	高中學生
Organization	German Swiss International School
得獎者	德瑞國際學校
Product	MRRAED: Mixed Reality Rehabilitation Activities for Elderly with Dementia
得獎產品	樂活「腦」友:認知障礙症長者混合現實復康活動應用
Description	In Hong Kong, 1 in 10 elderly is suffering from cognitive impairment, including
產品簡介	dementia - a challenge to our society from financial and medical aspects.
	This project aims to design a Mixed Reality (MR) rehabilitation activities application called MRRAED that allows the elderly with dementia to simultaneously practice physical and cognitive skills via a user-friendly setting, immersive virtual environment, and customized content. To maximize the effectiveness of the application, MRRAED integrates multiple

therapy approaches to dementia treatment, including exercises and physiotherapy, multi-sensory environment therapy, and reminisce therapy.

The project team is partnering with the elderly care center to conduct usability and effectiveness tests with dementia patients. In the future, we aim to collaborate with tech companies and NGOs to provide VR headsets with the MRRAED app for free to the elderly with dementia in HK and worldwide.

Awards & Honors:

- Gold Award, HKICT Award: Student Innovation 2022
- Gold Award, Greater Bay Area STEM Excellence Award 2022
- The Best Potential Award, HK Student Science Project Competition 2022
- Distinction, Hong Kong Youth Science & Technology Innovation Competition 2022
- Bronze Award, Student Innovation, Smart China Expo 2022

在香港,每10名長者中就有1人患有認知障礙症——這是對我們社會在經濟和醫療方面的挑戰。

該項目旨在設計一個名為 MRRAED 的混合現實(MR)康復活動應用程式,該應 用程式允許患有認知障礙症的長者,通過用戶友好的設置、沉浸式虛擬環境和定 制內容,同時練習身體和認知技能。

為了更能發揮應用的有效性,MRRAED 整合了認知障礙症治療中,常用的三種方法,包括運動和物理治療法、多感官環境治療法和回憶治療法。

項目組正與地區長者中心合作,對認知障礙症患者進行可用性和有效性測試。未來,我們的目標是與科技公司和非政府組織合作,為香港和世界各地的認知障礙症病患長者,免費提供裝有 MRRAED 應用程式的 VR 眼鏡,在家中或院社使用。

曾獲獎項:

- Gold Award, HKICT Award: Student Innovation 2022
- Gold Award, Greater Bay Area STEM Excellence Award 2022
- The Best Potential Award, HK Student Science Project Competition 2022
- Distinction, Hong Kong Youth Science & Technology Innovation Competition 2022
- Bronze Award, Student Innovation, Smart China Expo 2022

• APICTA2	022 Winner 大獎得主
Category	Tertiary Students
類別	專上學生
Organization	The Hong Kong Polytechnic University
得獎者	香港理工大學
Product	Mutual Cognitive Human-Robot Collaborative Manufacturing System
得獎產品	基於人機互認知的人-機械人協作系統
Description	To address the problems of difficult customized production and insufficient robot
產品簡介	flexibility in the on-demand manufacturing process, a cognitive Cobot control system
	is proposed to improve and smoothen the human-robot collaboration process.
	In order to realise intelligent operations in highly refined and flexible assembly
	situations, we developed a set of augmented reality (AR) guided human-robot
	collaborative manufacturing system for customized products. It integrates virtual and
	realistic task planning and dynamic guidance of visual data which enhance the
	intelligence of robots. It also facilitates information sharing with Augmented Reality
	(AR) and provides human-in-the-loop control approaches in a user-friendly manner to
	better fuse human operators' intelligence. AR-assisted human-robot collaborative
	flexible production moves towards intelligent manufacturing managed by industrial
	information technology, migrating algorithmic models from the field of artificial
	intelligence to realize the identification of customized products in complex industrial
	scenarios at the cost of small samples, significantly improving the efficiency of
	assembly in existing manufacturing models in small and medium-sized enterprises,
	enhancing the ability of robots to perform multi-modal tasks, freeing people from
	repetitive processes, and making human-robot collaboration the optimal choice for
	companies in the industry.
	為了解決定制化生產所面對的困難和機器人靈活性不足的問題,我們提出一個基
	於人機互認知的機械人協作製造系統,以改善雙方的協作效率。
	為了在高度精細和靈活的裝配情況下實現智能操作,我們開發了一套增強現實
	(AR)引導的人機協作製造系統。它集成了虛擬現實的任務規劃及視覺數據的動
	態引導,並增強了協作式機器人的人工智慧和 AR 信息共享,以用戶友好的方式
	提供人為監督的控制方法,從而更好地融合操作員和協作式機器人的智慧。AR
	輔助的人機協作彈性生產,以工業化資訊科技管理,邁向數字化的智能製造,並
	引進人工智能領域的算法模型,結合到複雜的工業場景中,以製作小額樣品的成
	本,實現個人化產品識別,並且明顯地改善目前中小企業製造模式的組裝效率,
	增強協作機器人執行多模式任務的能力。系統將人從重複的製造過程中解放出

來,使人機協作成為行內企業的最佳選擇。