產品可靠性暨系統安全研發中心
CENTRE FOR ADVANCES IN RELIABILITY AND SAFETY
A Research Centre admitted under AIR@InnoHK Cluster

CAiRS
NEWSLETTER
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PARTNERSHIP WITH CAiRS "UNITE FOR EXCELLENCE, TOGETHER WE THRIVE"

與 CAiRS『攜手協作，成就無限』

Cover Story

INAUGURATION OF IEEE RELIABILITY SOCIETY, HONG KONG CHAPTER
成立IEEE Reliability Society香港分會

The IEEE Reliability Society, Hong Kong Chapter (IEEE RSHK) is officially inaugurated. IEEE RSHK is a key technological and innovative ecosystem development, promoting advancements in reliability and safety in Hong Kong. CAiRS is fully committed to supporting its activities.

IEEE Reliability Society香港分會 (IEEE RSHK) 正式成立。IEEE RSHK是本地創科生態圈的重要一環，致力促進香港產品可靠性及安全性的創新發展。而產品可靠性暨系統安全研發中心將全力支持相關活動。

HKSTP x CAiRS COLLABORATION AGREEMENT
香港科技園公司 與 產品可靠性暨系統安全研發中心 的合作協議

The new Collaboration Agreement between HKSTP and CAiRS, on third-generation semiconductors and 3D System in Package, will help to unlock huge potential for third-generation semiconductors. The insights from these collaborative engagements will drive new industrialization initiatives and smart city applications. This will continue to both utilize and grow Hong Kong's world-class legacy in electronics and manufacturing, to take advantage of the global micro-e growth trend.

香港科技園公司與產品可靠性暨系統安全研發中心在第三代半導體和三維系統封裝方面的新合作將有助於釋放第三代半導體的巨大潛力。這些項目的成果將用作推動新型工業化發展及智慧城市的應用，藉由繼續運用和發展香港在電子業及製造業的世界級優勢，抓緊微電子日益增長的全球機遇。

MEMORANDUM OF UNDERSTANDING (MOU) BETWEEN CAiRS & MTR
產品可靠性暨系統安全研發中心與香港鐵路有限公司簽署合作備忘錄

The signing of the MOU between CAiRS and MTR marks the beginning of a long-term partnership. This would create more opportunities to jointly develop advanced artificial intelligence technology in the future and strengthen the overall reliability and safety of MTR.

合作備忘錄的簽署標誌著 CAiRS 和港鐵的長期合作夥伴關係，透過備忘錄簽訂後，將有更多機會共同合作研發先進的人工智能技術，以提升港鐵整體的可靠及安全性。

INTRODUCTION OF IEEE RELIABILITY SOCIETY, HONG KONG CHAPTER

IEEE Reliability Society香港分會簡介

The IEEE Reliability Society, Hong Kong Chapter (IEEE RSHK) is a dynamic professional organization dedicated to the technological advancement and promotion of reliability and safety in Hong Kong. As a local chapter of the global IEEE Reliability Society, it serves as a platform for professionals, researchers, and students to collaborate, exchange knowledge, and enhance their skills in the field of reliability. The IEEE RSHK also aims to provide a global professional perspective for the local and regional audience.

The Hong Kong chapter will develop and disseminate information with regards to reliability best practices such as testing methodologies, compliance and certification procedures, system reliability, and product reliability. It will also be a leading forum to discuss technological issues related to reliability in Hong Kong, including but not limited to issues, standards, and jobs. It will provide members with a professional platform to share experiences, learn and develop together.

The Hong Kong chapter also organizes a variety of activities and events, including technical seminars (both online and physical delivery) and technical visits, to facilitate networking and knowledge exchange among its members. By fostering collaboration and knowledge exchange, the IEEE RSHK plays a vital role in advancing reliability in Hong Kong. CAiRS is delighted to provide full support for its activities.

IEEE Reliability Society香港分會 (IEEE RSHK) 是一個充滿活力的專業組織，致力於香港的技術發展和可靠性與安全性的推廣。作為全球IEEE Reliability Society的本地分會，它為專業人士、研究人員和學生提供了一個協作、交流知識和提高可靠性領域技能的平台。IEEE RSHK也旨在為本地和區域受眾提供全球專業視角。

這個新成立的分會將發展和宣傳可靠性的最佳做法，例如測試、合規性、認證、系統可靠性和產品可靠性。 它也將成為香港的領先論壇，討論與可靠性相關的技術問題，包括但不限於問題、標準和工作。

它將為會員提供一個分享經驗、共同學習、共同發展的專業平台。還會組織多元化的活動，包括技術研討會 （線上和實體研討會）以及技術探訪，以促進其成員之間的網路和知識交流。透過促進合作和知識交流，IEEE RSHK 在提高香港的可靠性方面發揮著至關重要的作用。CAiRS 亦非常樂意為其活動提供全力支持。

Ir Prof. Winco KC Yung, Chairman, IEEE RSHK (eight from left) and Mr. Peter Ng, Vice Chairman, IEEE RSHK (seven from right) posed a group photo with all founding members of IEEE Reliability Society, Hong Kong Chapter
IEEE RSHK主席容錦泉教授工程師（左八）及副主席吳漢瑜先生（右七）與IEEE Reliability Society香港分會全體創始成員大合照

香港科技園公司與
產品可靠性暨系統安全研發中心合作簡介

The new Hong Kong Science and Technology Parks Corporation (HKSTP) x CAiRS collaboration aims to provide vital testing and pilot-at-scale capabilities to microelectronics (micro-e) and advanced manufacturing startups. CAiRS is an InnoHK Centre for collaboration and a market-leading regional hub for research in Reliability and Safety Innovation. The HKSTP's Heterogenous System Integration Laboratory (HI Lab) focuses on third-generation semiconductors and 3D System in Package (SiP) capabilities. This kind of collaborative effort completes an end-to-end innovation to production value chain for micro-e ventures, who often lack the capability and resources to test their innovations at scale. This collaboration between CAiRS and the HI Lab would further enhance this critical capability, which significantly improves innovation, product safety and reliability. There is also a market potential for startups at all stages, ultimately elevating the micro-e sector and advancing the city's new industrialization mission.

The HKSTP-CAiRS partnership commits both parties to provide training sessions and consultations for micro-e ventures. Co-development opportunities for product reliability and failure analysis for third generation semiconductors and sensors will also be explored. The insights from these collaborative engagements will help to unlock significant potential for third-generation semiconductors that can be used in electric vehicles, 5G technology, and for smart manufacturing and transport in Hong Kong and the Greater Bay Area.

香港科技園公司（科技園公司）與 產品可靠性暨系統安全研發中心（CAiRS）之間的合作，旨在共同協助微電子及先進製造業初創提升必要測試及量產的能力。CAiRS是InnoHK創新香港研發平台的研發實驗室，是專注研究產品可靠性及安全創新的領先樞紐。而科技園公司的異構系統整合實驗室（HI Lab），專門為第三代半導體及3D系統級封裝（3D SiP）技術而設。這種合作為微電子初創提供大規模測試其產品及技術的能力及資源，以完善由端到端開發到生產的整個行業價值鏈。是次合作可以進一步強化HI Lab的支援能力，透過協助微電子業初創突破瓶頸，大幅推動行業創新發展，改善產品安全性與可靠性。不同階段的新創公司也能提高市場潛力及微電子業整體水準，以實現香港新型工業化的發展目標。

科技園公司與CAiRS的合作，會為微電子初創提供培訓課程和諮詢服務，並會探討共同進行第三代半導體和傳感器產品可靠性和失效分析項目的機會。這些項目的成果將有助於釋放第三代半導體的巨大潛力，這些半導體可用於電動車、5G技術以及香港和大灣區的智慧製造和運輸。

Ir Dr HL Yiu, Chief Corporate Development Officer of HKSTP (front, left) and Ir Prof Winco KC Yung, Centre Director and Executive Director of CAiRS (front, right), signed a collaboration agreement under the witness of Mr Oscar Wong, Head of Business Development of HKSTP (back, left) and Ir Prof. HC Man, Dean of Faculty of Engineering of PolyU (back, right)
香港科技園公司首席企業發展總監姚慶良博士工程師（左前）與CAiRS總監及執行董事容錦泉教授工程師（右前）簽訂合作協議。香港科技園公司業務發展總監黃家裕（左後）及香港理工大學工程學院院長文効忠教授工程師（右後）擔任見證人

INAUGURATION OF IEEE RELIABILITY SOCIETY, HONG KONG CHAPTER CUM HKSTP X CAiRS COLLABORATION AGREEMENT SIGNING CEREMONY

IEEE Reliability Society香港分會成立 暨 香港科技園公司 與 產品可靠性暨系統安全研發中心(CAiRS) 簽署合作協議

We are proud to announce the official inauguration of IEEE Reliability Society, Hong Kong Chapter (IEEE RSHK) and to celebrate the signing of collaboration agreement between HKSTP x CAiRS on 27 September 2023. This momentous occasion was attended by over 100 guests from government, industry, and academia. We would like to take this opportunity to express our heartfelt appreciation to all the co-organizers, supporting organizations, distinguished guests and friends from industries involved in making this event a reality. The event also featured the roundtable forum, keynote speeches and industry sharing sessions from renowned experts and industry partners in reliability, prognostics, and safety.

我們於2023年9月27日聚首一堂，很榮幸地宣佈 IEEE Reliability Society香港分會正式成立，並慶祝香港科技園公司與產品可靠性暨系統安全研發中心攜手簽署合作協議。超過 100 位來自政府、業界及學術界的嘉賓出席了這一個重要時刻。我們謹藉此機會向所有協辦單位、支持機構、各位嘉賓和業界朋友致以衷心的感謝，使當天的活動圓滿結束。此次活動還包括可靠性、預測和安全領域知名專家和行業合作夥伴的圓桌論壇、主題演講和行業分享會。

The inauguration and signing ceremony was attended by over 100 guests from government, industry and academia
來自政產學界的100多名嘉賓出席了成立典禮暨簽署儀式

Ms Lillian Cheong, Under Secretary for Innovation, Technology and Industry of the HKSAR, said: "I am delighted to join the inauguration of the IEEE Reliability Society (Hong Kong Chapter) cum HKSTP x CAiRS Collaboration Agreement Signing Ceremony, which echoes with the vision and mission of the I&T Blueprint promulgated by the HKSAR Government in December last year. One of Hong Kong's clear advantages in I&T is our strong R&D capabilities and our potential for unexpected break-throughs. The Government will continue to promote interactive development between the upstream, midstream and downstream sectors and to support the technology industry development. We will also further strengthen and better leverage our distinctive edge as an international window and platform connecting our Motherland with the international community. By combining the strengths of the IEEE Reliability Society and CAiRS, we can anticipate groundbreaking advancements and these advancements will not only enhance the reliability of existing systems but also pave the way for the development of innovative technologies that will shape our future."

香港特別行政區創新科技及工業局副局長張曼莉女士表示：「我很高興出席IEEE Reliability Society香港分會成立典禮暨香港科技園公司與產品可靠性暨系統安全研發中心（CAiRS）的合作協議簽署儀式，這個合作正好配合特區政府去年12月公布的《香港創新科技發展藍圖》的願景和使命。香港有著雄厚的科研實力及追求突破的精神，特區政府將繼續促進上中下游的合作以及推動創新科技產業發展，並進一步加強及發揮香港背靠祖國、聯通世界的獨特優勢。我期待IEEE Reliability Society和 CAiRS 的合作帶來的突破，為我們創新科技的發展塑造美好未來。」

The inauguration and signing ceremony was officiated by (from left to right) Ir Winco Yung, Centre Director and Executive Director of CAiRS, Wing-Tak Wong, Deputy President and Provost of PolyU, Ms Lillian Cheong, Under Secretary for Innovation, Technology and Industry of the HKSAR, Mr Albert Wong, CEO of HKSTP, Kenneth KY Wong, Chair, IEEE Hong Kong Section and Head of EEE Department of HKU and Mr Andy Wong, Head of Innovation and Technology, Invest Hong Kong
（由左至右）CAiRS總監及執行董事容錦泉教授工程師、香港理工大學常務及學務副校長黃永德教授、香港特別行政區創新科技及工業局副局長張曼莉女士、香港科學園公司行政總裁黃克強先生、IEEE Reliability Society香港分部主席、香港大學電機電子工程系主任黃建業教授，以及投資推廣署創新及科技行業主管黃煒卓先生出席並見證成立典禮及簽署儀式

Roundtable Forum on the topic of "Reliability of Semiconductors" was presided over by (from right to left) Ir Prof. Winco KC Yung, Centre Director & Executive Director of CAiRS, Mr. Steve Chuang, Chairman, The Federation of Hong Kong Industries, Ir Dr Humphrey Leung, JP, Vice Chairman, Hong Kong Electronic Industries Association, Dr Carmen Fung, Associate Director, Strategic Development, HKSTP, Mr Peter Ng, Vice President, ASMPT Hong Kong Limited
以「半導體的可靠性」為主題的圓桌論壇（由右至左）CAiRS總監及執行董事容錦泉教授工程師、香港工業總會主席莊子雄先生、香港電子業商會副主席梁廣偉博士工程師, JP、香港科技園公司策略發展部副總監馮家敏博士、ASMPT副總裁吳漢瑜先生

The collaboration between CAiRS and HKSTP paves the way for the development of reliable microelectronics and semiconductor ecosystem in Hong Kong. It is going from strength to strength and has full support from the HKSAR Government. The establishment of the IEEE Reliability Society Hong Kong Chapter will provide the foundation on which technology innovation is based. This initiative will have the potential of developing internationally recognized standards in Hong Kong and the Greater Bay Area. May this new chapter and partnership thrive and exceed all expectations, fostering innovation, driving advancements, and making a lasting impact on the reliability engineering landscape!

產品可靠性暨系統安全研發中心和香港科技園公司之間的緊密合作，得到了香港特區政府的全力支持，共同在香港發展可靠的微電子和半導體生態系統。而IEEE Reliability Society香港分會的成立將為技術創新奠定基礎，這項目將有潛力在香港和大灣區制定國際認可的標準。願這新成立的分會和新建立的協作關係蓬勃地發展，並超越所有人的期望，促進創新，推動進步，並對可靠性工程領域產生深遠的影響！

Keynote speaker (Prof. Enrico Zio from the Department of Energy, Politecnico di Milano, Milan, Italy, and is IEEE Reliability Past Chairman of Italy Chapter and Distinguished Lecturer) in the morning session.
上午的主講嘉賓 (意大利米蘭理工大學能源學系的 Enrico Zio 教授, IEEE Reliability 義大利分會前主席及傑出講師)

Keynote speaker (Ir Ivan Cheung, General Manager-Rolling Stock Maintenance, MTR Corporation) in the afternoon session.
下午的主講嘉賓 (香港鐵路有限公司 鐵路車輛維修部總經理 張泰倫先生)

Q&A session after industry sharing by Mr. Colin Kwan, Chief Executive Officer of the MEMSDrive (Middle) and Dr Stanislav Markov, the Director of Engineering, Meridian Innovation Limited (Left)
MEMS Drive行政總裁Colin Kwan先生（中）與邁瑞迪創新工程總監Stanislav Markov博士（左）進行業界分享後的問答環節

Booth Visit
參觀展位

CAiRS Laboratory Tour
參觀CAiRS實驗室

CAiRS & MTR MOU SIGNING CEREMONY
CAiRS 與 MTR合作備忘錄簽署儀式

The signing of the Memorandum of Understanding (MOU) between CAiRS & MTR marks the beginning of a long-term partnership, to promote innovative research exchanges on reliability and safety in mass transportation. The MOU signed with MTR will focus on research in three major areas (Anomaly Detection, Knowledge Transfer, Prognostics and Health Management). Through this collaboration, we will take advantage of our resources and talents who are familiar with innovative technologies, and jointly develop advanced artificial intelligence technology in the future that will be contributing to the enhancement of the overall reliability and safety of the MTR's operations.

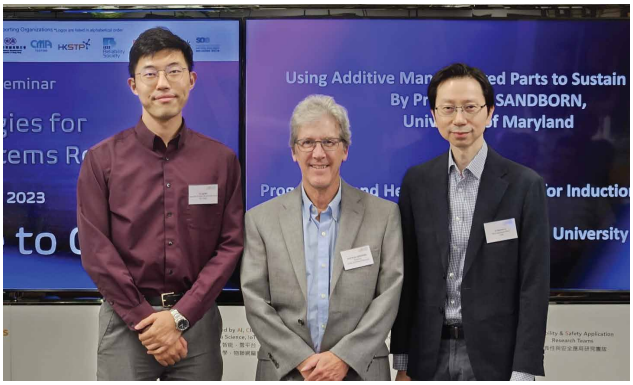
備忘錄的簽署標誌著 CAiRS 和港鐵的長期合作夥伴關係的開始，促進公眾運輸可靠性和安全性方面的創新研究交流。與港鐵簽署的合作備忘錄將專注於三大範疇（異常檢測、知識轉移、預測和健康管理）聚焦研究。 透過是次合作，未來我們將利用熟悉創新科技的人才和資源優勢，共同開發先進的人工智能技術，將有助於提升港鐵營運的整體可靠性和安全。

CAiRS and MTR signed a Memorandum of Understanding in June 2023 to cooperate in promoting innovative research exchanges on reliability and safety
CAiRS與MTR於2023年6月簽署合作備忘錄，合作促進可靠性與安全性創新研究交流

PUBLIC SEMINAR - STRATEGIES FOR SUSTAINING SYSTEMS RELIABILITY
公開研討會 -『維持系統可靠性的策略』

The CAiRS Public Seminar titled “Strategies for Sustaining Systems Reliability” was held on 10 Aug 2023. There were approximately 50 attendees from different industries and backgrounds present at the seminar to learn and engage in inspiring discussions. Our many thanks to the two speakers (Professor Peter Sandborn, Professor in the CALCE Electronic Products and Systems Center at the University of Maryland, and Dr Siqi Bu, Associate Professor and Associate Head (EEE) of the Hong Kong Polytechnic University) who delivered comprehensive presentations that provided valuable insights on their respective fields. This seminar was a testament to the power of knowledge-sharing, and we look forward to seeing you at the next seminar.

由本中心舉辦的公開研討會『維持系統可靠性的策略』於2023 年 8 月 10 日已圓滿結束，來自不同行業和背景近 50名與會者聚首一堂，進行了啟發性的學習和討論。 感謝兩位主講嘉賓（來自美國馬里蘭大學帕克分校Center for Advanced Life Cycle Engineering (CALCE) Peter Sandborn教授和香港理工大學電機及電子工程學系副系主任暨副教授卜思齊博士）的深入介紹，就他們各自專業領域提供了寶貴見解。本次研討會證明了知識共享的力量，我們期待在下一次研討會上與您見面。



Featured speakers (Prof. Peter Sandborn & Dr Siqi Bu) posed a group photo with Ir Clement Li, Chief Operating Officer of CAiRS at the seminar
主講嘉賓 (Peter Sandborn教授及卜思齊博士) 與CAiRS首席營運官李寶雄工程師在研討會上合照留念

HKSTP x CAiRS Public Seminar & Training Session – Reliability & Safety Risks in Electronics Products & Systems
公開研討會和培訓課程 -『電子產品和系統的可靠性和安全風險』

CAiRS x HKSTP had the privilege of hosting an incredible public seminar & training session titled “Reliability & Safety Risks in Electronics Products & Systems” on 23 Aug 2023 and it was a success! There were approximately 100 attendees from different industries and backgrounds engaged in this inspiring event. This seminar/training focused on Reliability and Safety Risks in Electronics Products and Systems, and the information shared was mind-blowing. We had the honor of having Prof. Michael PECHT and Dr Diganta DAS, renowned experts in the field, as our keynote speakers. Their insights and expertise left everyone in awe.

CAiRS聯同香港科技園公司於2023 年 8 月 23 日舉辦的公開研討會和培訓課程『電子產品和系統的可靠性和安全風險』已圓滿結束！ 大約 100 名來自不同行業和背景的與會者參與了是次活動。 這次研討會/培訓活動的重點是有關電子產品和系統的可靠性和安全風險，分享的信息令人興奮。 我們很榮幸邀請到該領域的知名專家 Michael Pecht 教授和 Diganta Das博士作為我們的主講嘉賓。 他們的見解和專業知識讓每個人都驚嘆不已。

Featured speakers (Prof. Michael PECHT & Dr Diganta DAS) posed a group photo with Ir Prof. Winco KC Yung at the seminar
主講嘉賓(Michael PECHT教授及Diganta DAS博士) 與容錦泉教授工程師在研討會上合照留念

INTERNATIONAL CONFERENCE - RELIABILITY AND PROGNOSTICS HEALTH MANAGEMENT OF MICROELECTRONICS FORUM
國際會議 -『微電子的可靠性與故障預測健康管理論壇』

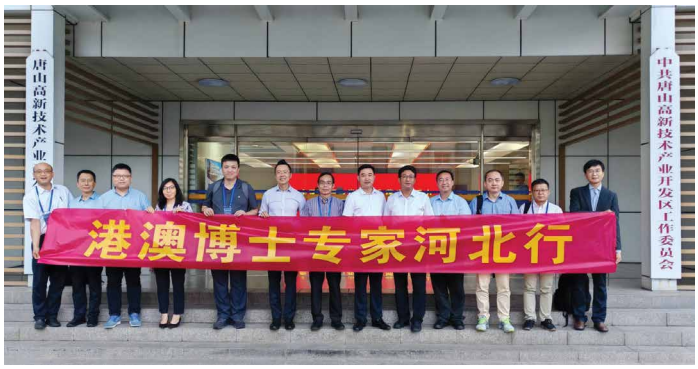
We were excited to host the "Reliability and Prognostics Health Management of Microelectronics Forum" at Hong Kong Electronic Fairs on 16 Oct 2023, attracting more than 100 guests. The reliability of microelectronics is a critical factor in achieving high reliability in electronic systems, and Prognostic Health Management (PHM) is the vital approach to predicting and managing its health and performance. The Forum gathered experts to discuss the latest advancements of PHM on enhancing system reliability and extending the lifespan of electronic components.

我們很高興於2023年10月16日在香港電子展舉辦「微電子可靠性與預測健康管理論壇」，吸引超過100位嘉賓參與。微電子的可靠性是實現電子系統高可靠性的關鍵因素，而預測健康管理（PHM）是預測和管理其健康和性能的重要方法。論壇雲集專家，共同探討PHM在增強系統可靠性及延長電子元件壽命的最新進展。

ROBOTIC TECHNOLOGY GROUP VISIT TO HEBEI
港澳機器人領域博士專家團河北行

Our Assistant General Manager, Dr Gary WONG, was in a delegation alongside with more than 30 experts and professors from Hong Kong and Macau, participated in a robotic technology group visit to Hebei, China for exploration and exchange from 7 to 11 Aug 2023. They visited Shijiazhuang City, Tangshan High-tech Zone, Hebei Medical University and North China University of Technology, and visited several robotics companies, biomedical companies and laboratories, etc. During this trip, they had in-depth exchanges with relevant local government officials, entrepreneurs and experts on the Hebei-Hong Kong-Macao Cooperation space.

早前本中心助理總經理 - 王澤南博士聯同香港和澳門三十多名專家教授參加了「港澳機器人領域博士專家團」到中國河北考察交流。 專家團到訪了石家莊市、唐山市高新區和河北醫科大學、華北理工大學，並實地走訪多家機器人企業、生物醫藥企業和實驗室等，與有關地方政府、企業家和專家進行交流，探討三方合作空間。



UMD RESEARCHERS VISIT TO CAiRS
馬里蘭大學研究人員到訪CAiRS

We extended our warm welcome to the Research Projects Leaders Prof. Michael Pecht, Prof. Peter Sandborn, Prof. Abhijit Dasgupta and Dr Diganta Das, from the University of Maryland (UMD), USA. It is our honor to have them visit CAiRS and join us in the collective pursuit of knowledge and innovation. Their visit presents a wonderful opportunity for collaboration, knowledge exchange, and fostering new partnerships. For their visit, we planned a series of engaging activities to facilitate further interaction and collaboration. These include seminars, workshops, and visits to our collaborators.

我們熱烈歡迎來自美國馬里蘭大學 (UMD) 的研究項目負責人Michael Pecht 教授、Peter Sandborn 教授、Abhijit Dasgupta教授和 Diganta Das博士。我們很榮幸他們來到CAiRS並與我們共同追求知識和創新。他們的訪問提供了合作、知識交流和建立新夥伴關係的絕佳機會。在他們訪問期間, 我們安排了一系列精彩的活動，以促進互動和合作。其中包括研討會、工作坊和拜訪我們的合作夥伴。

Dr Diganta Das

Prof. Michael Pecht

MTR

ASMPT

Prof. Peter Sandborn

Prof. Abhijit Dasgupta

HKEIA

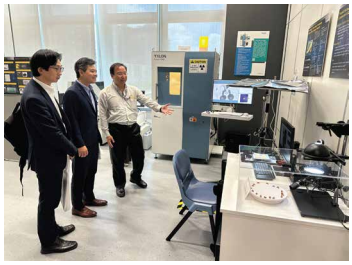
Activities Highlight

GUEST VISITS TO CAiRS
嘉賓到訪CAiRS

Guests from different local industries visited CAiRS to exchange insights in the areas of product reliability and system safety and had fruitful discussions on potential collaboration opportunities.

來自本地不同行業的嘉賓參觀了CAiRS，就產品可靠性和系統安全領域上交流，並討論了潛在協作的機會。

Institution of Engineering and Technology (26 June 2023)
英國工程技術學會 (2023年6月26日)



WKK Distribution Ltd. (11 July 2023)
王氏港建經銷有限公司 (2023年7月11日)

WeEn Semiconductors Co., Ltd (16 August 2023)
瑞能半導體科技股份有限公司 (2023年8月16日)

POLYU EEE STUDENT VISIT
香港理工大學電機及電子工程學系學士生到訪

A group of over 20 undergraduate students from the Department of Electrical and Electronic Engineering, PolyU visited CAiRS on 16 October 2023. Our research team had a wonderful sharing with the students about the latest development of AI-based reliability and safety technologies and applications. Apart from the sharing session, students also visited our laboratories, where they observed demonstrations of the latest technology and laboratory equipment.

香港理工大學電機及電子工程學系超過20名學士學生於2023年10月16日到訪CAiRS。我們的研究團隊與同學們就基於人工智慧的可靠性與安全技術及應用的最新發展進行了精彩的分享。學生們還參觀了我們的實驗室，並觀看了最新技術和實驗室設備的演示。

2023 SUMMER STEM INTERNSHIP PROGRAM
2023年暑期STEM實習計劃

Last summer, we offered valuable learning opportunities to local students. We aimed to encourage them to gain innovation and technology-related work experience, especially in the application of Artificial Intelligence technology and foster their interest in pursuing a career in I&T in Hong Kong. They truly made this summer an unforgettable experience for themselves, whilst under our guidance!

在過去的夏天，我們為本地同學們提供了寶貴的學習機會，鼓勵他們獲取創新及科技相關的工作經驗，尤其是人工智慧技術的應用，並培養他們投身香港創科行業的興趣。在我們的指導下，這個暑期STEM實習計劃確實為他們帶來一次難忘的經歷！

Let's check out some of the highlights HERE!
讓我們來看看一些精華片段吧！

NEWLY GRANTED PATENTS
最新批予專利

We are pleased to update that three new patents were granted lately.
我們很高興公佈三項新的專利已被批予。

Title名稱	Patent No. 專利編號
SYSTEM AND METHOD OF DATA-DRIVEN DEEP LEARNING MODELS FOR DETECTING ANOMALIES IN A STEEL WIRE ROPE	HK30088200
SYSTEM AND METHOD FOR A 1D-DICNN-GRU-BASED DEEP LEARNING FEATURE EXTRACTION MODEL IN NON-INTRUSIVE ELEVATOR MONITORING	HK30085577
SYSTEM AND METHOD FOR A DEVISED TRAINING PROCESS FOR IMBALANCED DATASET IN NON-INTRUSIVE ELEVATOR MONITORINGELEVATOR MONITORING	HK30088198

NEWLY PUBLISHED JOURNAL
最新發表期刊

Minzhen Wen#, Mesfin S. Ibrahim#, Abdulmelik H. Meda, Guoqi Zhang and Jiajie Fan*; # contributed equally. In-situ early anomaly detection and remaining useful lifetime prediction for high-power white LEDs with distance and entropy-based long short-term memory recurrent neural network. *Expert Systems with Applications*, Vol. 238, 15 March 2024, 121832.

WELCOMING NEW COLLABORATORS
歡迎新合作夥伴加入

We are delighted to have established collaborations with 5 more companies (Hong Kong Aerospace Technology Group Limited (HKATG), Intertek Hong Kong, Jekco Elevators Ltd., Parking Systems Limited (PSL) and WeEn Semiconductors Co., Ltd.). This now makes a total of 40 industrial collaborators that CAiRS is engaged with in Smart City & Smart Manufacturing.

我們非常高興與多五間公司 (包括香港航天科技集團有限公司、天祥公證有限公司、捷高電梯有限公司、柏景科技有限公司和瑞能半導體科技股份有限公司) 協作。現在我們合共有40 間來自智慧城市和智能製造不同市場領域的合作夥伴。

NEW VIDEO
最新視頻

We are delighted to announce the release of our latest video showcasing our collaboration project with German Pool (Hong Kong) Company Limited, to develop a data-driven intelligent online detection and lifetime prediction system for their induction cookers.

我們很高興地發布最新視頻，展示我們與德國寶（香港）有限公司的合作項目，為他們的電磁爐開發數據驅動的智能在線檢測和壽命預測系統。