



HONG KONG  
ICT AWARDS  
2024 香港資訊及  
通訊科技獎

# Smart Mobility Award 智慧出行獎

**Smart  
Logistics**  
智慧物流

**Smart  
Transport**  
智慧交通

**Smart  
Tourism**  
智慧旅遊



Leading Organisation  
籌辦機構



Hong Kong

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**2024香港資訊及通訊科技獎：智慧出行最佳人工智能應用獎**

MTR Corporation /  
The Hong Kong University of Science and Technology  
港鐵公司 / 香港科技大學

Public transport ridership simulation  
and railway planning - MTR to Keep  
Cities Moving  
鐵路營運客流量預測及規劃 以港鐵推動  
城市前行

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**Hong Kong ICT Awards 2024: Smart Mobility (Smart Transport) Award**  
**2024香港資訊及通訊科技獎：智慧出行 (智慧交通) 獎**

**Gold Award 金獎**

MTR Corporation /  
The Hong Kong University of Science and Technology  
港鐵公司 / 香港科技大學

Public transport ridership simulation  
and railway planning - MTR to Keep  
Cities Moving  
鐵路營運客流量預測及規劃 以港鐵推動  
城市前行

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**Silver Award 銀獎**

Transport Department, The Government of the HKSAR /  
Autotoll Limited / Arup  
香港特別行政區政府運輸署 / 快易通有限公司 / 奧雅納工程顧問

HKeToll — the free-flow tolling system  
不停車繳費系統「易通行」

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**Bronze Award 銅獎**

MTR Corporation / Hong Kong Applied Science  
and Technology Research Institute Company Limited  
港鐵公司 / 香港應用科技研究院有限公司

Revolutionizing Emergency  
Communication: AI-Driven NLP  
Transcription for Immediate Incident  
Attention in Tetra Radio  
緊急通訊新突破：AI驅動的自然語言處理  
傳譯用於Tetra無線電中的應急即時通訊

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**Certificate of Merit 優異證書**

Hong Kong Centre for Logistics Robotics Limited /  
Drainage Services Department, The Government of the HKSAR  
香港物流機械人研究中心有限公司 / 香港特別行政區政府渠務署

Tumbler Inspection Ball Robot  
with Embodied Intelligence  
不倒翁球形地下管道檢測機械人

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Hong Kong ICT Awards 2024: Smart Mobility (Smart Logistics) Award  
2024香港資訊及通訊科技獎：智慧出行 (智慧物流) 獎

Gold Award 金獎

Hong Kong Productivity Council  
香港生產力促進局

Smart Pack@TCM  
智能包裝@中藥

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SF Supply Chain - Hong Kong & Macau /  
Cathay Pacific Airways Limited  
順豐供應鏈 - 香港及澳門 / 國泰航空有限公司

Wing to Shelf Tracker

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Bronze Award 銅獎

PARKnSHOP / Geek Plus Internaional Co.,Ltd /  
Acquaintance Enterprises Limited  
百佳超級市場 / 極智嘉國際有限公司 /  
卡車聯科技服務有限公司

PNS Online Fulfilment Centre  
PNS網購物流中心

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Certificate of Merit 優異證書

Zuellig Pharma Limited  
裕利醫藥有限公司

Automation Warehouse

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Hong Kong ICT Awards 2024: Smart Mobility (Smart Tourism) Award  
2024香港資訊及通訊科技獎：智慧出行 (智慧旅遊) 獎

Gold Award 金獎

Maphive Technology Limited  
蜂圖科技有限公司

CityGeni - Smart City App Specializing  
in Barrier-Free Navigation  
CityGeni - 智慧城市應用程式，為旅客  
和市民提供無障礙導航

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Silver Award 銀獎

Locolla Limited / WiTricity HK Limited

LocoBike

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Bronze Award 銅獎

Lincogn Technology Co. Limited  
嶺勤科技有限公司

Yoswit's Smart Hotel System  
Yoswit智能酒店系統

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Certificate of Merit 優異證書

Ctrip Corporate Travel Holding (Hong Kong) Limited  
攜程商旅控股 (香港) 有限公司

Digital Business Travel Solution  
數位商旅解決方案

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# Smart Mobility Award 智慧出行獎



## Background 背景

The Hong Kong ICT Awards (HKICTA) aims at recognising and promoting outstanding information and communications technology (ICT) inventions and applications, thereby encouraging innovation and excellence among Hong Kong's ICT talent and enterprises in their constant pursuit of creative and better solutions to meet business and social needs.

The HKICTA was established in 2006 with the collaborative efforts of the industry, academia and the Government. Organised by the Digital Policy Office, and led by Hong Kong ICT industry associations and professional bodies, the Awards aims at building a locally espoused and internationally acclaimed brand of ICT awards.

There are eight categories under the HKICTA 2024. There is one Grand Award in each category, and an "Award of the Year" is selected from the eight Grand Awards by the Grand Judging Panel. In addition, in a bid to foster the innovative use of artificial intelligence (AI), each of the eight categories has established a new distinguished accolade: the "Best Use of AI" award, magnifying and honouring outstanding achievements in harnessing the power of AI in respective areas.

香港資訊及通訊科技獎旨在表揚及推廣優秀的資訊及通訊科技發明和應用，以鼓勵香港業界精英和企業不斷追求創新和卓越，謀求更佳和更具創意的方案，滿足企業的營運需要，造福社會。

通過業界、學術界和政府的共同努力，香港資訊及通訊科技獎於二零零六年成立。香港資訊及通訊科技獎由數字政策辦公室舉辦，並由香港業界組織及專業團體籌辦，目的是為香港建立一個廣受香港社會愛戴、並獲國際認同的資訊及通訊科技專業獎項。

2024香港資訊及通訊科技獎設有八個獎項類別。每個類別均設有一個大獎，而最終評審委員會再從八個大獎中甄選出「全年大獎」。此外，為了激發更多人工智能的創新應用，每個獎項類別都增設一個嶄新獎項：「最佳人工智能應用」獎，以彰顯並表揚那些在相關範疇應用人工智能方面取得傑出成就的參賽作品。



## Objective 目的

### 1. Building Hong Kong as a Smart City with innovative ICT applications

Mobility is essential if a city is to function properly, and is experiencing one of the most disruptive. Innovations in digitalisation and alternative energies, episodes evolving in previous decades, are unleashing their potential on the streets, forming the bases of smart mobility. Smart mobility is one of the core subjects of any smart city, it involves optimising transportation, infrastructure and communications in order to raise the bar for sustainability, efficiency, safety and air quality. A smart city should be connected and citizen-centric to enhance interconnectedness of every aspect of daily life, bringing more convenience, better quality of life, and a higher level of city competitiveness.

The award aims to encourage the development and innovation of applications, leveraging the integration of Internet of Things (IoT), artificial intelligence, big data and analytics, robotic, digital communications, intelligent transport systems, data platforms, as well as mobile applications, which will enhance the flow of people, goods, and tourists; improve the experiences of citizens and visitors; and enable smart mobility for a smarter Hong Kong.

### 2. Championing HK as a Hub for IT Talents, Creativity and Innovations

The award will serve as a platform to facilitate the dynamic and transparent exchange of expertise among renowned ICT professionals in the community, to sparkle and co-create innovative ideas, and to nurture technology talents. GS1 HK will also nominate appropriate winners to participate at other regional and global awards competition. We hope that through these recognising and nurturing initiatives, it will further stimulate creativity.

### 3. Inspiring Adoption by Local Industry

Innovation and technology are drivers for economic growth and the key to enhance business competitiveness. Award winning cases attest to successful implementation, helping users in Transport, Logistics and Tourism industries to understand the value of smart business applications, encouraging industry adoption, creating a mutually beneficial interaction between technology and business sectors. These lead to a sustainable eco-system of technology-driven new business paradigm which not only improves the daily lives of users but also brings jobs, innovation, and the creation of new start-ups with high-growth potential.

### 1. 鼓勵開發嶄新智能應用，同建香港智慧城市藍圖

流動性是現代都市的基本元素，而它正經歷著顛覆性變化。數碼化和新能源在過去幾十年不斷發展，在每個城市街道上展現各種可能性，成為智慧出行的基礎。智慧出行是建立智慧城市的關鍵，涉及優化交通、基建和通訊，能打造出可持續性、效率、安全和空氣質量的新標準。智慧城市應該互聯互通，以市民為中心，加強日常生活各個方面的聯繫，帶來更多方便、更好的生活質量和更高競爭力的城市。

本獎項旨在鼓勵開發有利智慧出行發展的科技應用，希望集物聯網、人工智能、大數據分析、機械人技術、數碼通訊、智能交通系統、數據平台、和流動應用程式等科技之大成，為市民、遊客和貨物提供更優質的傳輸系統，改善本地人和遊客的交通體驗之餘，更使智慧出行系統趨向成熟，促進香港作為智慧城市的發展。

### 2. 匯聚資訊科技專才，打造創意創新之都

本獎項將成為本地業界與資訊及通訊科技專才的交流平台，藉雙方熱烈而坦誠的交流促進創新和合作，並培育科技人才。符合條件的得獎者更可獲香港貨品編碼協會提名，爭逐其他地區性及全球性獎項。通過這些業界認同和栽培項目，期望進一步激發參賽者的創新。

### 3. 鼓勵本地業界採用得獎方案

創新和科技不但促進經濟增長，更是加強企業競爭力的關鍵。獎項對成功實踐智慧出行理念的個案予以肯定，使交通、物流和旅遊業用戶更了解商業應用的價值，藉此鼓勵業界採用方案，建立科技界與商界之間的互惠關係，構築以科技推動的嶄新可持續商業模式，當中不僅包括改善市民的日常生活，還帶來就業機會和具有高增長潛力的新初創企業。

## Message from Chief Executive of Leading Organiser 籌辦機構總裁獻辭



**Ms Anna LIN, MH, JP, FCILT**  
**Chief Executive**  
**GS1 Hong Kong**

**林潔貽女士，MH，JP，FCILT**  
**香港貨品編碼協會**  
**總裁**

The Government of HKSAR has continued to create new impetus towards its smart mobility goals, including the development of a low-altitude economy, such as exploring drone deliveries, aerial tours and more; the establishment of the Maritime and Port Development Board, and building smart & green mass transit systems etc. These are expected to reinforce Hong Kong's regional hub position for logistics, tourism and supply chain service, driving growth in AI, innovation & technology, and enhancing Hong Kong's smart city foundation.

As the leading organiser of the Smart Mobility Award for the 7<sup>th</sup> consecutive year, we are delighted to introduce the 'Best Use of AI Award' this year to recognise outstanding winners. This initiative aims to encourage broader adoption of AI within both the public and private sectors, and to enhance awareness of innovative technologies. GS1 Hong Kong welcomes more organisations to join in exploring the future of smart city development, further enhancing Hong Kong's competitiveness.

Among the awardees, some winning entries harnessed the power of big data to develop AI predictive models, enabling predictions of train and passenger conditions, thereby enhancing the efficiency of the transportation system. Another entry seamlessly integrated digital technologies with warehouse systems, enabling the timely replacement of necessary aircraft parts and improving aviation safety.

On behalf of GS1 Hong Kong, I would like to express my sincere gratitude for the support from the Digital Policy Office, supporting organisations as well as our professional judging panel and assessment panel that have made the Smart Mobility Award a success. GS1 Hong Kong will continue to leverage international standards with a focus on "Go Digital • Go Green" strategy, working closely with all stakeholders to support Hong Kong's development into a world-class smart city.

Lastly, I would like to extend my heartiest congratulations to all winners and my deepest appreciation to all participants. Their time and effort in joining this Award have not only been invaluable, but have also significantly contributed to the healthy growth of our city's digital economy and innovation technology.

特區政府近年持續為智慧出行注入新動力，最新推出發展低空經濟倡議，包括無人機配送服務、空中遊覽，並改革香港海運港口發展局，以及建造智慧綠色集體運輸等，都有利於鞏固本港作為區內物流、旅遊和供應鏈服務中心的地位，同時推動人工智能及創新科技的發展，進一步強化香港智慧城市的基礎。

香港貨品編碼協會作為連續第七年「智慧出行獎」的籌辦機構，今年加設「最佳人工智能應用獎項」，鼓勵公私營機構更廣泛應用人工智能 (AI)，提高對創新技術的重視。我們樂見更多機構參與，共同探索智能城市建設的未來，進一步提升香港的競爭力。

在今年的獲獎者中，部分優勝作品結合大數據建構了AI預測模型，預估列車及乘客情況，進而提升交通系統效率。亦有獲獎作品以數碼技術連通倉庫管理系統，即時知悉所需替換的飛機零件，提高航空安全保障。

本人謹代表香港貨品編碼協會衷心感謝數字政策辦公室、各支持機構、專業的評審委員會及審核委員會的鼎力支持，令本屆「智慧出行獎」得以順利舉行。我們將繼續與政府及各業界夥伴合作，以國際標準及「Go Digital • Go Green」策略，支援香港發展成為世界級智慧城市。

最後，本人在此恭賀所有得獎者，並感謝各參與機構。他們不僅為此次活動付出了時間及努力，亦為數字經濟和創科發展作出了貢獻。

## Message from Chairman of Judging Panel 評審委員會主席獻辭



**The Honourable Duncan CHIU**  
**Functional Constituency-**  
**Technology and Innovation,**  
**Legislative Council of the HKSAR**

**邱達根議員**  
**香港特別行政區立法會**  
**功能組別 - 科技創新界**

My honor to once again participate in the judging of the Hong Kong ICT Awards - Smart Mobility Award. Smart mobility, as an important pillar of smart city construction, not only concerns the improvement of traffic efficiency, but is also a key force driving Hong Kong's economic, environmental and social sustainable development. As the most recognized and longest-standing information technology award in Hong Kong, the "Smart Mobility Award" this year represents a forward-looking exploration of Hong Kong's future mobility.

During the judging process of this year's competition, we were delighted to see that participants not only pursued technological breakthroughs, but also paid attention to solving real-world problems, from smart transportation systems to public service robots, from big data analysis to artificial intelligence applications. This fully showcased the outstanding talents and unremitting efforts of Hong Kong's science and technology talent in driving the construction of smart cities.

In today's world, the trend of green and smart is sweeping the globe, and urban development and modes of transportation are undergoing profound changes. Hong Kong is also at a critical juncture. The development of smart mobility not only requires the guidance and support of the government, but also the joint efforts and innovation of the industry. I believe that by hosting this year's award, we can further stimulate the innovative vitality of the industry and drive the emergence of more outstanding smart mobility solutions.

Finally, I would like to express my special thanks to the Digital Policy Office and GS1 Hong Kong for their meticulous preparation of this year's award, as well as to each member of the judging panel for their support. I would also like to extend my sincerest respect and congratulations to all the participants. Let's look forward to next year, when more outstanding participants will bring their brilliant ideas to the table to contribute to the smart city construction in Hong Kong.

很榮幸再次參與香港資訊及通訊科技獎 — 「智慧出行獎」的評審工作。智慧出行作為智慧城市建設的重要支柱，不僅關乎交通效率的提升，更是推動香港經濟、環境與社會可持續發展的關鍵力量。作為香港最具認受性和具有最長歷史的資訊科技獎項，本屆「智慧出行獎」的舉行，是對香港未來出行方式的一次前瞻探索。

在本屆評審工作的過程中，我們欣喜地看到，參賽者不僅在技術層面追求突破，更在實際應用中注重解決問題，從智慧交通系統到公共服務機器人，從大數據分析到人工智能應用，充分展現了香港創科人才在推動智慧城市建設方面的卓越才華和不懈努力。

當今世界，綠色與智慧的浪潮正席卷全球，城市建設與出行方式在經歷深刻變革，香港亦處於發展關鍵時期。智慧出行的發展不僅需要政府的引導和支持，更需要業界的共同努力和創新。我相信通過本屆獎項的舉辦，能夠進一步激發業界的創新活力，推動更多優秀的智慧出行解決方案湧現。

最後，我要特別感謝數字政策辦公室和香港貨品編碼協會為本屆獎項的精心籌備，以及感謝評審委員會的每一位成員的支持。同時，也要向所有參賽者表示最誠摯的敬意和祝賀。讓我們共同期待來年，有更多優秀的參賽者攜帶他們的智慧結晶，為香港的智慧城市建設添磚加瓦。



## Smart Mobility Award Judging Panel 智慧出行獎評審委員會

### Chairman 主席



The Honourable Duncan CHIU 邱達根議員  
Functional Constituency - Technology and Innovation,  
Legislative Council of the HKSAR  
香港特別行政區立法會  
功能組別 - 科技創新界

### Deputy Chairman 副主席



Dr Toa CHARM 湛家揚博士  
Associate Professor of Practice  
in Innovation and Technology, Business School,  
The Chinese University of Hong Kong  
香港中文大學  
商學院創新及科技專業應用副教授



Ir Susanna SHEN, MH 孫淑貞工程師，MH  
Former Head of Corporate Information Technology,  
The Hong Kong and China Gas  
Company Limited (Towngas)  
香港中華煤氣有限公司 (煤氣公司)  
前任企業資訊科技總監

### Members 成員



Ms Lily LAI 黎秀琮女士  
Chief Information Officer  
Airport Authority Hong Kong  
香港機場管理局  
首席資訊主管



Ms Sylvia CHUNG 鍾慧敏女士  
Chief Business Impact Officer  
Chinachem Group  
華懋集團  
企業體驗總裁



Mr Gavin WAH 華國基先生  
Chief Systems Manager  
(Mainland and Industry Collaboration)1  
Digital Policy Office  
The Government of the HKSAR  
香港特別行政區政府  
數字政策辦公室  
總系統經理 (內地及產業合作) 1

## Smart Mobility Award Judging Panel 智慧出行獎評審委員會

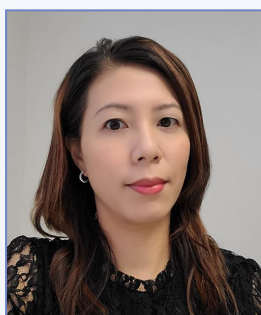
### Members 成員



Ir Stephen LAU, JP 劉嘉敏工程師，JP  
Secretary General (Honorary)  
Hong Kong Computer Society  
香港電腦學會  
秘書長(名譽)



Ir Dr Barry LEE 李志康博士工程師  
Immediate Past President  
Hong Kong Institution of Engineers  
香港工程師學會  
上任會長



Ir Elsa YUEN 袁美儀工程師  
President  
Hong Kong Logistics Association  
香港物流協會  
會長



Ms Wendy CHOW 周寶芬女士  
Head of Innovation and Technology -  
Information & Communications Technology  
Invest Hong Kong  
The Government of the HKSAR  
香港特別行政區政府  
投資推廣署  
創新及科技行業主管 - 資訊及通訊科技



Mr Gene SOO 蘇頌禮先生  
Head of Ecosystem - Global Innovation  
MTR Corporation Limited  
香港鐵路有限公司  
科技生態系統主管 — 全球創新



Ir Charles SO 蘇洪德工程師  
Chairman of Smart Mobility Committee  
Smart City Consortium  
智慧城市聯盟  
智慧出行委員會主席

\* In alphabetic order by company / organisation name

\* 按公司 / 機構名稱字母順序排列



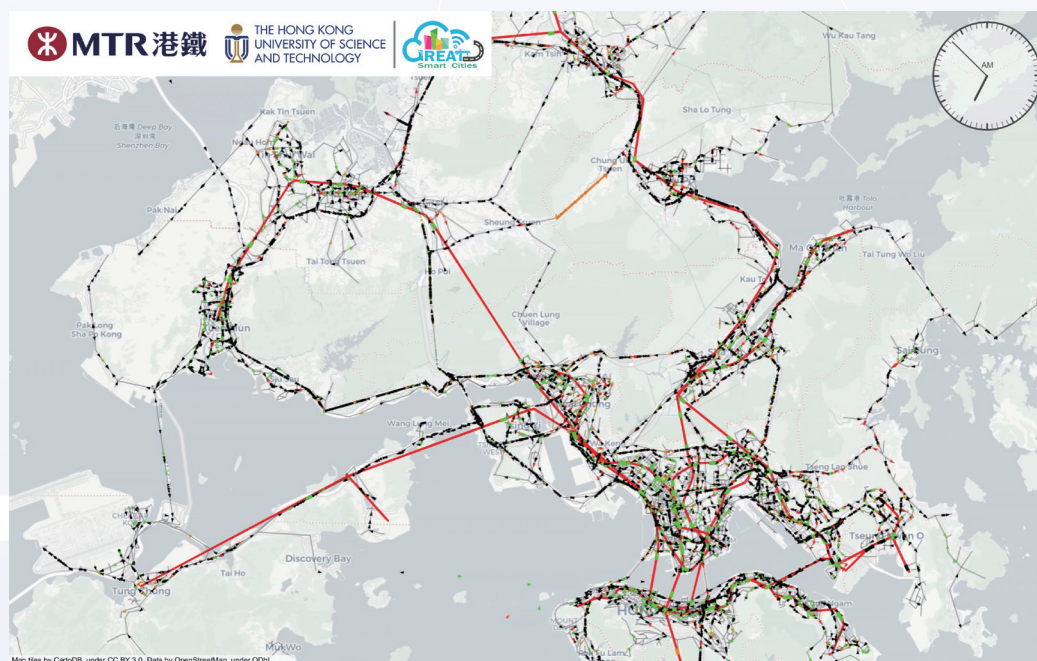
# Smart Mobility Grand Award and Smart Mobility (Smart Transport) Gold Award and Best Use of AI Award

## 智慧出行大獎 及 智慧出行 (智慧交通) 金獎 及 最佳人工智能應用獎

MTR Corporation / The Hong Kong University  
of Science and Technology

港鐵公司 / 香港科技大學

[www.mtr.com.hk](http://www.mtr.com.hk) / [www.hkust.edu.hk](http://www.hkust.edu.hk)



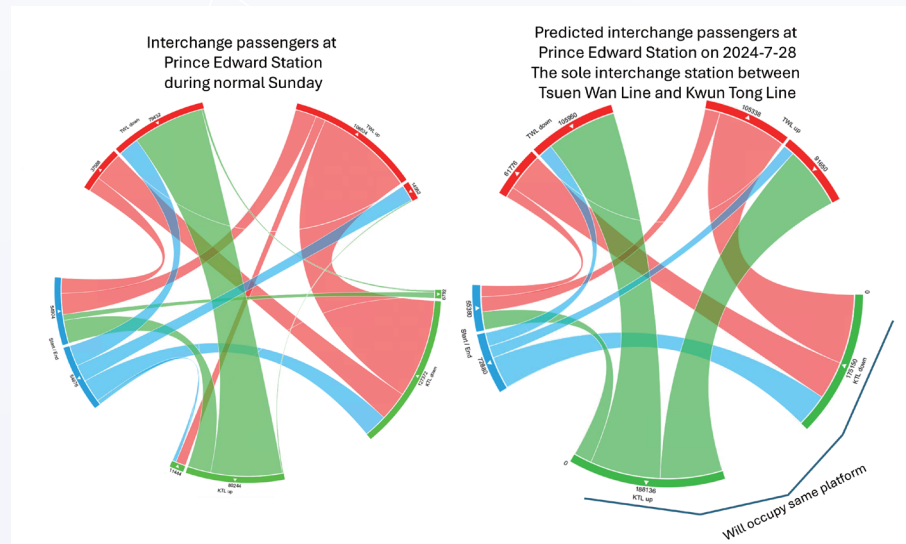
### Public transport ridership simulation and railway planning – MTR to Keep Cities Moving

In railway operations, the knowledge to visualize passengers' need and behaviours is imperative for station and traffic management. The ability to visualize crowd distribution is vital for effective deployment of resources for a safe and reliable railway environment to the satisfaction of their passengers.

HKUST had built and advanced a large-scale dynamic simulation model for Hong Kong's entire public transportation system, including MTR, bus, mini-buses, trams and ferries. This agent-based digital twin is able to simulate the daily trips of over 4 million active travellers within the city throughout the day. To calibrate this model's behavioural parameters, the model draw upon the Travel Characteristics Survey from the Hong Kong Government, which covers the travel demands for over 165,000 origin-destination pairs. Among that, MTR provided over 6 million daily station entry-exit trips of more than 8,000 station pairs within the network for calibration.

Hong Kong is among the largest transit system in the world that carries 11 million trips or 90% of all trips a day.

Use case: The digital twin was successfully applied to simulate the effects of a planned partial service suspension on Kwun Tong Line on 28th July 2024 (7-28), whereby MTR endeavoured to minimize impact with all stations remained in service. This agent-based model allowed them to configure changes to their network in simulation of 7-28 traffic, to generate actionable data and operational insights.



Model calibration involves solving a bi-level optimization or mathematical program with equilibrium constraints. As such, the complexity of this model together with this sheer amount of data causes it to become computationally expensive and intractable. They hence cast the calibration problem into a computational graph structure and develop the innovative state-of-the-art iterative backpropagation algorithm from machine learning techniques, and metamodel calibration methods. Iterative backpropagation is an efficient gradient calculation machine learning method, that scales well with large amounts of decision variables, and model calibration making it applicable for network service planning.

This ridership forecast not only confers MTR the intelligence that facilitates a systematic decision-making process for railway planning, it is also a powerful showcase of industrialization of the HKUST-MTR Joint Research Laboratory R&D endeavours, that empowers MTR to “Keep Cities Moving”.

As the MTR data spans the whole day, collected daily and automatically, it provides a pathway to automate the update of the model. This high availability of a significant segment of travel data, together with the use of state-of-the-art calibration methods, enables the model to closely reflect the latest travel trends in a timely manner.

## 鐵路營運客流量預測及規劃 以港鐵推動城市前行

香港科技大學—港鐵聯合實驗室的項目團隊應用大數據校準的數位孿生模型，預測在不同情況下港鐵網路的客流量，讓營運團隊能及早規劃及執行相應的營運安排和管理措施，推動城市繼續前行。

科大團隊為本港公共交通系統建立了一個大型的動態模擬模型，模擬超過400萬活躍旅客的日常出行，涵蓋港鐵、巴士、電車和渡輪。

為提升模型的準確性，模型參考了香港政府的交通習慣調查數據，該調查涵蓋了超過165,000組起訖點的出行數據。其中港鐵提供網絡內每日8,000對車程及超過600萬次的乘客出行數據以進行校準。

團隊運用數位孿生模型，模擬及預測港鐵觀塘綫於2024年7月28日服務調整對當日乘客出行的影響。港鐵團隊按分析採取適切措施，維持所有車站服務同時對乘客的影響減至最低。

模型校準涉及解決雙層優化、具有平衡約束的數學規劃問題。基於這個模型的複雜性以及龐大的數據，令其計算成本極高及難以處理。因此，團隊將校準問題轉換為計算圖結構，並基於機器學習技術和元模型校準方法開發出創新的迭代反向傳播算法，以此高效的梯度計算機器學習方法，有效地處理大量決策變數及模型校準，以至應用於網絡服務規劃。

數位孿生模型可以模擬不同的場景並預測客流量—讓港鐵能夠作出適切部署，調度資源，例如調整列車班次和車站人手來滿足營運需要，持續提供安全高效的服務。

每日全天候自動紀錄的港鐵數據為模型帶來自動更新的可能性，這些出行數據配合最先進的校準方法，可以及時反映最新的乘客出行趨勢。

### Comments from Judging Panel

This solution excellently demonstrates how to combine open data with MTR passenger data to adjust simulation models, achieving better traffic management. By utilizing a large amount of diverse data and surveys for updates, the model can more accurately simulate the behavior patterns of active travelers and provide automatic updates to forecast daily passenger flow. This helps in making more suitable travel arrangements in response to unexpected situations and improves the efficiency of the transportation system, bringing benefits to society as a whole.

### 評審委員會評語

這個模型優秀地展示了如何將開放數據與港鐵的乘客數據相結合並用以調整預測模型。透過利用了大量數據及調查，不僅能更準確地模擬活躍旅客的行為模式，還能自動更新，預測每日的客流量，實現更好的交通管理。這有助於在面對突發情況時做出更合適的出行安排，提升交通系統的效率，為整個社會帶來實際效益。



# Smart Mobility (Smart Transport) Silver Award

## 智慧出行 (智慧交通) 銀獎

Transport Department, The Government of the HKSAR /  
Autotoll Limited / Arup

香港特別行政區政府運輸署 / 快易通有限公司 / 奧雅納工程顧問

[www.td.gov.hk](http://www.td.gov.hk) / [www.autotoll.com.hk](http://www.autotoll.com.hk) / [www.arup.com](http://www.arup.com)



### HKeToll – the free-flow tolling system

"HKeToll" is one of the latest smart mobility initiatives as promulgated in the Hong Kong Smart City Blueprint, aimed at utilising technology to enhance the overall efficiency of the transport system in Hong Kong. This initiative does not require the construction of new roadside structure, replaced the traditional manual and automatic toll booths, allowing motorists to pay tunnel tolls without having to stop at toll booths.

The "HKeToll" service is mainly composed of the "HKeToll system" and "Toll Tag". By using Radio Frequency Identification (RFID) technology, with the support of Automatic Number Plate Recognition technology and Lidar, the system can read the unpowered Toll Tags affixed on the windscreen of the vehicle and tolls can be deducted from the pre-set toll payment accounts automatically. Additionally, the back-end system running in the Government Cloud is flexible, allowing for the rapid addition of new functions to further enhance service efficiency.

Since its launch on 7 May 2023, the number of vehicle tags issued by "HKeToll" has covered over 99% of registered vehicles in Hong Kong. Currently, "HKeToll" has been implemented smoothly at all government tolled tunnels and the Tsing Sha Control Area, becoming the primary toll collection system for all vehicles passing through tunnels. "HKeToll" has also facilitated the implementation of Time Varying Toll to rationalise the traffic flows at the three road harbour crossings since December 2023, achieving an apparent reduction of peak hour traffic queues. The environment benefited from a reduction of carbon dioxide emissions equivalent to planting 500,000 trees each year, actively promoting ESG goals and marking a significant step forward for smart mobility in Hong Kong.

### 不停車繳費系統「易通行」

「易通行」是《香港智慧城市藍圖》其中一項智慧出行措施，旨在運用科技提高運輸系統的整體效率。此措施無須新建道路建築物，全面取代傳統的人手及自動收費亭，讓車輛無須在收費亭停車便可繳費。

「易通行」服務主要由「易通行收費系統」及「繳費貼」兩部分組成。透過無線射頻識別技術，配合自動車牌識別技術和光學雷達，系統可讀取貼於車輛擋風玻璃上無須接駁電源的繳費貼，便可從預設的繳費戶口中自動扣除隧道費。同時，在政府雲端上的「易通行」後台系統具靈活性，能視乎情況快速增設新功能，進一步提升服務效率。

自2023年5月7日推出以來，「易通行」發出的車輛貼數目已佔全港已領牌的車輛超過99%。隨著「易通行」陸續在全港的政府收費隧道及青沙管制區全面實施，已成為車輛使用隧道的主要收費系統。這促成了三條過海隧道在2023年12月實施「分時段收費」，使繁忙時段「車龍」情況顯著減少，藉此每年可減少的二氧化碳排放量相當於種植50萬棵樹，積極推動可持續發展目標，為香港的智慧出行跨出一大步。



### Comments from Judging Panel

The HKeToll system effectively demonstrates how innovation and technology can improve the road traffic condition, delivering significant impact and benefits to the public by addressing road congestion problem and providing a smoother driving experience.

### 評審委員會評語

HKeToll系統善用創新科技改善道路交通狀況，有利減少道路擁擠情況，為道路使用者帶來更順暢的駕駛體驗。

# Smart Mobility (Smart Transport) Bronze Award

## 智慧出行 (智慧交通) 銅獎

MTR Corporation / Hong Kong Applied Science and  
Technology Research Institute Company Limited  
港鐵公司 / 香港應用科技研究院有限公司

[www.mtr.com.hk](http://www.mtr.com.hk) / [www.astri.org](http://www.astri.org)

### Revolutionizing Emergency Communication: AI-Driven NLP Transcription for Immediate Incident Attention in Tetra Radio

In railway operations, clear and reliable communication is crucial, especially during emergencies. A new system, titled "Revolutionizing Emergency Communication: AI-Driven NLP Transcription for Immediate Incident Attention in Tetra Radio" (REC), co-developed by MTR and ASTRI, addresses the limitations of traditional Tetra Radio communications by integrating advanced AI technologies like Automatic Speech Recognition (ASR) and Natural Language Processing (NLP).

REC aims to transform emergency communication within the railway sector by ensuring every message is instantly captured, accurately translated, and promptly acted upon, despite the mixed use of languages, domain-specific protocols, and technical jargon. Currently, daily train operations rely heavily on verbal communication, requiring operators to give commands, read back responses, and exchange information via a dedicated Communication System. REC is designed to support daily interactions among traffic controllers, train crews, and station staff, helping to identify possible misunderstandings and inaccuracies in radio communications. This ensures that the team communicates responsively with clarity and accuracy, particularly in emergencies.

REC leverages cutting-edge and patented Automatic Speech Recognition (ASR) and Natural Language Processing (NLP) technologies, providing functions such as discrepancy identification, keywords and jargons recognition, data extraction and analysis, which are essential for the diverse operational networks of MTR.

By providing real-time text translation and analysis of all communications, REC adds reassurance to communication during emergencies, as misunderstanding can be immediately identified and rectified to further improve the communication effectiveness and facilitates responsive emergency handling.

### Comments from Judging Panel

The entry is found innovative and specifically designed to transcribe a mix of Cantonese and English as well as understanding the idiomatic expressions used in MTR which ensure timely and accurate communication during the emergency situation.



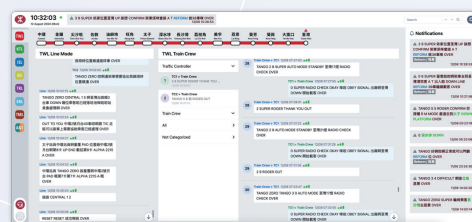
### 緊急通訊新突破：AI驅動的自然語言處理傳譯用於Tetra無線電中的應急即時通訊

在鐵路營運環境中，當發生緊急情況之時，清晰可靠的通訊至關重要。MTR和ASTRI共同開發的新系統“突破性緊急通訊：為應急而設的Tetra無線電AI驅動NLP轉錄” (REC) 應運而生，它通過整合自動語音識別 (ASR) 和自然語言處理 (NLP) 等人工智能技術，解決了傳統Tetra無線電通信的侷限性。

REC的目標是改革鐵路行業內的緊急通訊，確保每個訊息都能立即被捕捉、準確翻譯並及時處理，即使在混合使用語言、行業通訊協定和術語的情況下也能應對自如。系統利用尖端的專利ASR技術，將音頻通訊轉換為文本，精準地滿足混合語言操作、領域知識和關鍵術語以及鐵路運營的嘈雜環境等特定要求。

此外，REC運用NLP技術，能夠識別用字差異、方言和行業術語、整合和分析數據，切合港鐵多元化的運營網絡。REC還包括一個全面的工具集，用於記錄所有對話內容，便於文檔記錄和問責。它允許將文本轉錄和原始音頻文件存檔在安全數據庫中，讓行車控制主任可以高效地檢索和查看通訊內容。

通過提供實時文本翻譯和分析，REC確保團隊成員無論使用何種母語，均能清晰、準確且即時地瞭解情況。由於誤解可以立即被識別和解決，同事在緊急情況下更能安心溝通，從而提高溝通效率並促進迅速的緊急處理。



### 評審委員會評語

此方案頗為創新，尤其是它能夠在理解港鐵常用字詞，並同時傳譯廣東話和英語。即使在緊急情況下，該系統也能確保雙方可進行清晰有效的溝通。



# Smart Mobility (Smart Transport) Certificate of Merit 智慧出行 (智慧交通) 優異證書

Hong Kong Centre for Logistics Robotics Limited /  
Drainage Services Department, The Government of the HKSAR  
香港物流機械人研究中心有限公司 / 香港特別行政區政府渠務署

[www.hkclr.hk](http://www.hkclr.hk) / [www.dsd.gov.hk](http://www.dsd.gov.hk)

## Tumbler Inspection Ball Robot with Embodied Intelligence

Jointly developed by the Drainage Services Department and the Hong Kong Centre for Logistic Robotics, the Tumbler Inspection Ball (TIB) Robot is an innovative product for inspections of underground pipes or tunnels. It integrates modern robotics and artificial intelligence technology, allowing for collecting interior information of underground pipes or tunnels in harsh environments over long distances. Conventional inspection methods, such as CCTV vehicles, boats, drones, or man entry cannot safely conduct thorough inspections over long distances. Drawing inspiration from a tumbler, this ball-shape robot maintains stability even in turbulent water. Its ingenious design enables seamless movement with the water flow, eliminating the need for additional power sources. The robot effectively overcomes the challenges associated with inspecting confined space and remains stable in turbulent water, avoiding capsizing issues. It captures stable and clear 360-degree high-definition videos, while its inertial measurement unit (IMU) provides precise positioning data. Artificial intelligence data analytics enable the automatic detection of defects in underground pipes or tunnels, providing detailed information for effective pipe or tunnel maintenance.

The TIB Robot greatly enhances efficiency of inspections of underground pipes or tunnels. By analyzing the collected high-definition videos and positioning data, it can identify the defects of pipes and potential issues, supporting maintenance efforts for underground pipes or tunnels. This helps reduce the risk of ground subsidence caused by pipe collapses, thereby enhancing public safety. Additionally, the use of TIB Robot eliminates the need for workers to enter underground pipelines for inspections, effectively preventing accidents and improving safety of inspection operations.



## Comments from Judging Panel

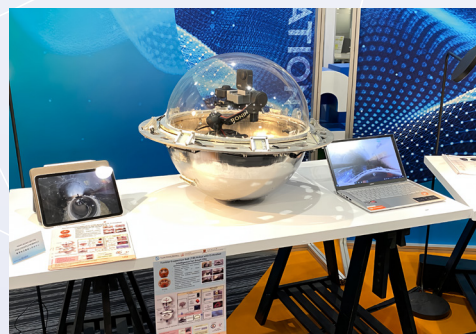
It is an innovative entry that tackles many existing constraints and helps improve utility maintenance while reducing the chance of traffic disruption caused by maintenance issues.



## 不倒翁球形地下管道檢測機械人

渠務署與香港物流機械人研究中心共同研發的不倒翁地下管道檢測機械人，是一款用於地下管道或隧道檢測的創新產品。它結合現代機械人與人工智能技術，能在惡劣環境下進行長距離收集地下管道或隧道內部的資訊。傳統的檢測方法如CCTV車仔、探測船、航拍機或人員進入地下管道或隧道都無法安全地進行長距離管道檢測。這款球形機械人利用不倒翁原理，能夠在湍急的水流中保持穩定，乘水而行，無需額外動力。它既能克服地下密閉空間檢測的挑戰，亦能提供360度穩定而清晰的高清影像。此外，慣性測量單元亦可提供精確定位資料。透過人工智能資料分析，自動偵測管道破損位置，提供詳細資訊以有效維護管道。

不倒翁檢測機械人透過收集得來的資訊，分析管道缺陷和潛在問題，從而大大提高地下管道檢測效率，減低地下管道倒塌所造成地面道路塌陷風險，進而提升公共安全。同時，使用該機械人避免了工人進入地下管道檢測的需要，預防事故發生，提高檢測工作的安全性。



## 評審委員會評語

這項方案具備創新性，有望解決許多現存的限制。不但有助於維護公用設施，還減少因進行維護而導致的交通問題。

# Smart Mobility (Smart Logistics) Gold Award

## 智慧出行 (智慧物流) 金獎

Hong Kong Productivity Council  
香港生產力促進局

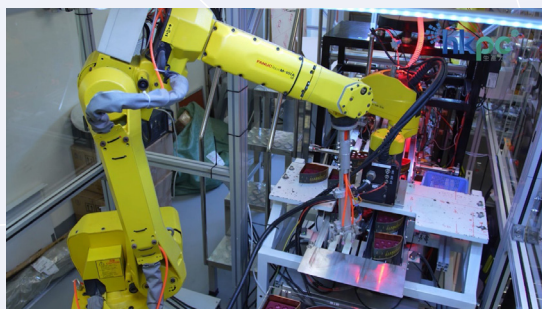
[www.hkpc.org](http://www.hkpc.org)

### Smart Pack@TCM

Hong Kong Productivity Council (HKPC) is dedicated to driving technology applications and New Industrialisation, empowering Hong Kong enterprises to harness New Productive Forces. HKPC has assisted Wai Yuen Tong Medicine Co. Ltd. (Wai Yuen Tong), a Good Manufacturing Practice (GMP) certified traditional Chinese medicine manufacturer, in designing and establishing an intelligent prototype solution for Chinese medicinal powders, addressing the bottleneck in the logistics supply chain where manual and time-consuming processes were prevalent.

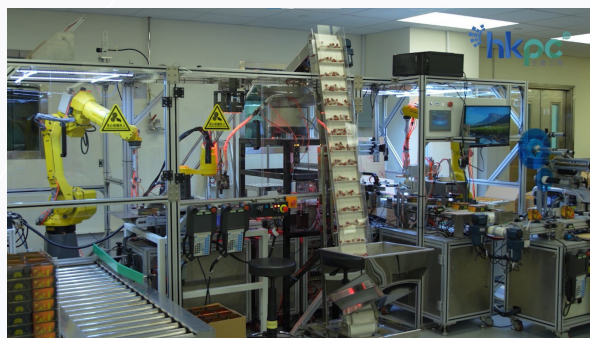
This development is a revolutionary GMP-compliant smart prototype solution that meets the complex and stringent processing requirements for Chinese medicinal powders. Leveraging HKPC's extensive experience and expertise in developing and designing intelligent automation systems, the solution integrates three industrial robots and over 10 vision programmes, cameras, and sensors. This combination, along with mechanical structures and control software, enables the high-speed and accurate insertion of tiny vials into metal cans. The system is compatible with various sizes, shapes, and colours of packaging materials, manpower requirements was significantly reduced by 90%, meanwhile, the output was doubled and individual productivity has increased 11 times.

The system also enhances the quality and stability of product packaging, providing data that helps Wai Yuen Tong improve production, logistics management efficiency, and market competitiveness, meeting the needs of traditional labour-intensive processes. This intelligent system also enables employees to learn system operations, thereby acquiring new skills and knowledge.



### Comments from Judging Panel

In the distribution process of traditional Chinese medicine packaging, due to the involvement of complex and delicate operations, a large amount of manpower is often required. This intelligent automation solution can address the manpower demand issue and significantly increase production output. After appropriate adjustments, it is believed that it can be widely applied in other environments or industries.



### 智能包裝@中藥

香港生產力促進局 (生產力局) 致力推動技術應用及新型工業化，賦能香港企業發展新質生產力。生產力局協助獲得中成藥生產質量管理規範認證 (GMP) 的傳統中成藥生產商一位元堂藥廠有限公司設計和建立智能中藥散劑包裝方案，以解決物流供應鏈中散劑包裝需要大量人手及時間的「瓶頸」。

這項革命性的GMP合規智能包裝解決方案，能滿足複雜和嚴格的中藥產品散劑包裝要求。生產力局憑藉在開發和設計智能自動化系統上的豐富經驗和專業知識，結合三台工業機械人及超過十個機械視像程式、攝像頭及傳感器，配合機械結構和控制軟件，能高速準確地將細小的藥樽插入金屬罐內，並兼容多種不同尺寸、形狀和顏色的包裝物料，使整個工序的產量大增一倍，人手需求減少九成，人均生產力提高十一倍，更好地調配人手處理其他工作。

系統有效提升產品包裝質素及穩固度，並提供數據以提高生產、物流管理效率和市場競爭力，滿足傳統勞動密集型工序的需要，更讓員工學會更多系統的操作，從而掌握新技能和知識。



### 評審委員會評語

中藥包裝的分配過程中，由於牽涉複雜且細微的操作，往往需要大量人手進行。這個智能自動化的方案能解決人手需求問題，並大大提高產量。經過適當的調整後，相信能廣泛應用於其他環境或行業。



# Smart Mobility (Smart Logistics) Gold Award

## 智慧出行 (智慧物流) 金獎

SF Supply Chain - Hong Kong & Macau /  
Cathay Pacific Airways Limited  
順豐供應鏈 - 香港及澳門 / 國泰航空有限公司

[www.sf-dsc.com.hk](http://www.sf-dsc.com.hk) / [www.cathay.com](http://www.cathay.com)

### Wing to Shelf Tracker

The Engineering Inventory Management team at Cathay Pacific, under the Cathay Group, aims to be a digitally-enabled, customer-centric unit that cost-effectively supplies the inventory needed to ensure optimal aircraft availability. It is crucial for Cathay that this team prevents as many cancellations and other operational disruptions as possible by effectively managing the spare parts required to support aircraft maintenance. A vital aspect of this is the 'repair loop' - the process from removing an unserviceable spare to sending it for approved repair and returning it to operational stock. By managing this well, the team can minimize stock holding and costs while maximizing spare parts availability.

The Wing to Shelf Tracker is a comprehensive supply chain management platform designed to streamline the handling and visibility of unserviceable aircraft parts. This innovative solution allows the tracking, monitoring and management of spares by consolidating the information in a central location and enabling the end user to visualize the entire lifecycle of aircraft parts, from inbound receiving to outbound dispatch and shipping operations. The tracker is integrated with the warehouse management system (WMS), acting as a centralized platform for communication and data exchange between customers, suppliers and parts owners. It provides comprehensive tracking of key milestones, systematizes the dispatch and shipping processes, and offers a real-time dashboard with critical operational information.

By seamlessly integrating cutting-edge technologies, the Wing to Shelf Tracker empowers aviation stakeholders with enhanced visibility, efficiency, and decision-making capabilities throughout the aircraft parts supply chain, contributing to improved aviation safety and operational excellence.



### Comments from Judging Panel

SF Supply Chain together with Cathay Pacific made use of their expertise on logistics and technologies in the aviation industry. It has significantly improved the operation efficiency, safety and productivity. More importantly, it seamlessly integrated key stakeholders together to co-create values.



### Wing to Shelf Tracker

國泰旗下國泰航空工程部庫存管理團隊致力建立一個數字化、以客戶為中心的團隊，以具成本效益的方式提供零部件庫存管理，確保飛機的可用性。庫存管理團隊擔當非常重要的角色，透過高效管理零部件及支援飛機維修，盡量減少航班取消和干擾其他營運。有效的零部件管理非常重視「維修循環」，即由拆卸不可用的零件、再交給合資格的維修商，最後運送零件作可用的庫存。妥善管理這個過程，降低所持有的庫存和成本，亦同時最大能限度地確保零件的可用性。

Wing to Shelf Tracker是一個為管理飛機零部件而設的一站式供應鏈管理平台，這項創新解決方案允許追蹤、監控和管理零部件，將相關信息集中在一個中央位置管理，使最終用戶能夠可視化整個飛機零件的生命週期。由入庫接收到出庫發貨的全過程，整個流程數碼化。由於平台與倉庫管理系統 (WMS) 無縫對接，為讓客戶、零件供應商及零件擁有者構建一個整合的溝通平台。其實時的報表及遠程訪問功能，助用戶獲取最新零件狀態，及時處理異常情況，優化營運決策，實現飛機零件供應鏈流程的數碼化管理。

通過無縫整合及數碼化技術，此追蹤平台提升飛機零件供應鏈的透明度和可追溯性，有利於航空安全和卓越運營。即使遇到意外或需要及時更換零件，良好的零件管理亦有助降低更換零件的時間，減少飛行乘客的等待時間，務求助客戶為普羅大眾提供一個優越的飛乘體驗。

### 評審委員會評語

SF供應鏈與國泰航空充分運用了其在航空及物流業的專長和技術。此方案可提升日常運營的效率、安全性和生產力。更重要的是，方案融合不同持份者的需求，有助整個供應鏈的協作。

# Smart Mobility (Smart Logistics) Bronze Award

## 智慧出行 (智慧物流) 銅獎

PARKnSHOP / Geek Plus International Co., Ltd /  
Acquaintance Enterprises Limited  
百佳超級市場 / 極智嘉國際有限公司 /  
卡車聯科技服務有限公司

www.pns.hk / www.geekplus.com / www.logflows.com

### PNS Online Fulfilment Centre

PARKnSHOP is Hong Kong's O+O (Offline plus Online) supermarket chain and one of the trusted brands in Hong Kong, featuring several renowned retail brands such as TASTE, FUSION, food le parc, GOURMET, GREAT FOOD HALL and more.

PARKnSHOP actively develops innovative products and services, their motto "BEST EASY VALUE". With an aim to provide seamless O+O experience, PARKnSHOP's eShop and mobile application offer added convenience to tech-savvy customers to shop from anywhere anytime. They adopted the best-in-class solutions to provide advanced delivery service to their customers, integrating the solutions with their internal systems.

By utilizing the Order Management Module (OMM), orders are dynamically split and routed to the optimal picking locations. A central system captures and updates inventory movements in real time, including sales data from Point-of-Sale and warehouse management systems.

PARKnSHOP leverages automation technologies in partnership with industry leaders to address the diverse picking process. their warehouses employ various automation technologies, including conveyor belts and sorting systems, tailored to different product types.

Additionally, they have implemented a network of "dark warehouses" powered by Geek+, which enable a high-speed Automated Storage and Retrieval System (ASRS) to efficiently manage our diverse product assortment. As one of the hybrid solutions in Hong Kong, it is capable of increasing pick accuracy and doubling picking efficiency.



### Comments from Judging Panel

The implementation of the solution has led to significant improvements in order fulfilment and delivery processes. It has not only benefited the company's overall business but also greatly enhanced the customer experience.



### PNS網購物流中心

百佳超級市場是本港具規模的線下及線上 (O+O) 超級市場連鎖店，為香港顧客信賴的品牌之一。百佳旗下更擁有多個知名零售品牌，包括TASTE、FUSION、food le parc、GOURMET及GREAT FOOD HALL等。

百佳不斷推出創新產品及服務，以「百種方便佳品超值」為宗旨，致力提供物超所值、應有盡有的貨品選擇、網上商店和流動應用程式，讓顧客隨時隨地選購貨品。集合了業界最佳解決方案，並與內部系統整合，為顧客提供O+O無縫購物及送貨體驗。

訂單管理模組為客戶選擇最佳取貨地點，配合中央系統，實時更新門店及倉庫，縮短送貨的時間，確保訂單準時送達。百佳亦與行業領袖緊密合作，採用了多種為不同產品量身定制的自動化技術，包括運輸帶和分揀系統。例如與極智嘉合作建立的黑暗倉庫，啟用高效的自動化存儲和取貨系統，此混合解決方案有助提高取貨準確率和效率。



### 評審委員會評語

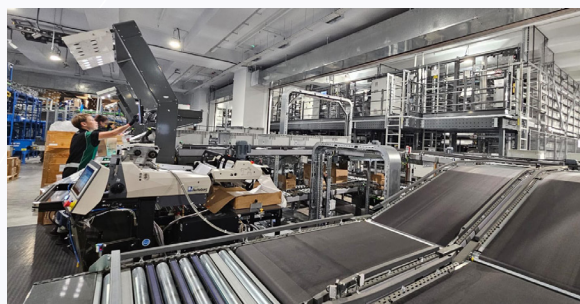
這方案的實施改善了訂單履行的情況以及提高交付效率，不僅為公司整體業務帶來效益，也大大提升了客戶體驗。



# Smart Mobility (Smart Logistics) Certificate of Merit 智慧出行 (智慧物流) 優異證書

**Zuellig Pharma Limited**  
**裕利醫藥有限公司**

[www.zuelligpharma.com](http://www.zuelligpharma.com)



## Automation Warehouse

Zuellig Pharma, a healthcare distribution company, operates two expansive distribution centers in Tuen Mun and Tsing Yi, covering a total area of 517,000 square feet. The Tuen Mun facility, which is the company's flagship, is a testament to innovation, integrating advanced technologies such as a goods-to-man pick-and-pack system and a meticulously monitored cold chain storage system that operates around the clock. This ensures the integrity and safety of medical products and equipment throughout their lifecycle within the facility.

The company's commitment to digitalization is evident in its investment in a digitally-orchestrated supply chain. This includes the development of mobile applications to facilitate the delivery of healthcare products and the implementation of a robust, production-grade supply chain traceability solution tailored for pharmaceutical companies. These digital innovations enhance efficiency, traceability, and medication safety, providing an additional layer of protection for patients and healthcare institutions.

Zuellig Pharma's adoption of technology extends to its business operations as well. Since 1996, the company has been utilizing GS1 HK's ezTRADE, a B2B e-commerce platform. This platform allows for the seamless exchange of tens of thousands of electronic purchase orders and invoices with partners on a monthly basis, streamlining business processes and fostering stronger relationships within the healthcare ecosystem.

In summary, Zuellig Pharma's dedication to innovation is reflected in its state-of-the-art distribution centers, digital supply chain solutions, and the use of electronic commerce platforms. These efforts not only improve operational efficiency but also contribute to the safety and reliability of the healthcare supply chain, ensuring that essential medical products reach their destinations in a timely and secure manner.



## Comments from Judging Panel

It demonstrates effective integration of various components, which is essential for the success of a complex pharmaceutical operation.

## Automation Warehouse

Zuellig Pharma, 作為一家醫療保健分銷公司，在屯門和青衣的兩個大型分銷中心，展示了自動化和數位化領域的卓越成就。尤其是屯門的旗艦中心，集成了尖端技術，如貨物到人揀選包裝系統和24小時監控的冷鏈存儲系統，確保了醫療產品在整個生命週期中的完整性和安全性。

在數位化協調的供應鏈上，公司開發移動應用程式促進醫療產品的交付並為製藥公司量身定製供應鏈追溯解決方案。

Zuellig Pharma利用先進的人工智慧技術，實時跟蹤系統和自動化管理智能倉庫，使用自動化機器人進行倉庫內部的物品搬運和整理。不但提高運輸效率和準確性，更增強透明度和客戶信任。

自1996年以來，Zuellig Pharma一直在使用GS1 HK的ezTRADE平臺，允許每月與合作夥伴無縫交換數以萬計的電子採購訂單和發票，簡化了業務流程。

這些自動化和數位化的努力，不僅提高了Zuellig Pharma的運營效率，還有助於醫療保健供應鏈的安全性和可靠性，確保了基本醫療產品能夠及時、安全地到達目的地。



## 評審委員會評語

這個方案在繁複的製藥過程上，成功處理環環相扣的每項工序細節。



# Smart Mobility (Smart Tourism) Gold Award

## 智慧出行 (智慧旅遊) 金獎

Maphive Technology Limited  
蜂圖科技有限公司

www.mapxus.com

### CityGeni - Smart City App Specializing in Barrier-Free Navigation

CityGeni is an innovative Smart City app by Maphive Technology Limited (Mapxus) that simplifies navigation in urban and indoor spaces. By integrating advanced indoor mapping and positioning technologies, CityGeni enhances user experience and supports Smart Mobility and Smart Tourism, making it an ideal tool for tourists exploring new cities. Users can navigate effortlessly and avoid getting lost, thanks to its reliable, adaptable navigation.

With an inclusive design, CityGeni caters to diverse users, offering a general map mode and text and audio options for visually impaired individuals. The app enriches the tourist experience by providing detailed information on points of interest and real-time updates while also highlighting barrier-free routes for those with mobility challenges.

Using cutting-edge Wi-Fi fingerprinting and sensor fusion technologies, CityGeni accurately determines user locations in complex indoor environments. Currently available in over 200 locations across Hong Kong, Taiwan, Singapore, and Japan, CityGeni aims to expand to over 1,000 landmark buildings, promoting urban mobility and inclusivity.

CityGeni's mission is to improve spatial awareness by answering essential questions: "Where am I?", "Where do I go?", and "How do I get there?" With features like virtual checkpoints and auditory cues, it makes navigation accessible for everyone, regardless of experience.



### Comments from Judging Panel

This proposal promotes social innovation, and its barrier-free design demonstrates inclusivity for diverse groups in society. It is believed that plans for future expansion into overseas markets will benefit a wider audience. The company has shown unwavering determination in launching new products, committed to continuous innovation and meeting market demands.



### CityGeni - 智慧城市應用程式，為旅客和市民提供無障礙導航

CityGeni是由蜂圖科技有限公司 (Mapxus) 開發的智慧城市應用程式，特別適合遊客，讓城市和室內導航更簡單無縫。該應用整合了先進的室內地圖和定位技術，不僅提升導航功能，還支持智慧旅遊，讓用戶輕鬆探索新城市。

CityGeni以包容性設計為特色，滿足不同需求，提供全面地圖模式，包括針對視障人士的文本和音頻選項，確保每個人都能獨立導航。該採用先進的Wi-Fi指紋識別和感應器融合技術，即使在複雜的室內環境也能精確定位，並結合音頻支持，凸顯無障礙路線，滿足行動不便者的需求。

目前，CityGeni已在香港、台灣、新加坡和日本的200多個地點運行，並計劃未來數年內擴展至1,000多個主要地標，以強化城市的流動性和包容性。

CityGeni的使命是解決「我在哪裡？」「我該去哪裡？」和「我怎麼去？」等問題。透過虛擬檢查點和聽覺提示，讓導航更輕鬆，是遊客探索城市的理想工具。



### 評審委員會評語

這項方案有利於推動社會創新，無障礙設計展現出對社會不同類別人群的包容性。相信未來擴展至海外市場的計劃，將惠及更多受眾。該公司在推出新產品方面展現出堅持不懈的精神，致力於持續創新和滿足市場需求值得嘉許。

# Smart Mobility (Smart Tourism) Silver Award

## 智慧出行 (智慧旅遊) 銀獎

Locolla Limited / WiTricity HK Limited

[www.locolla.com](http://www.locolla.com) / [www.witricity.com](http://www.witricity.com)



### LocoBike

LocoBike is revolutionizing urban mobility with its solar-powered micro-mobility system, integrating electric scooters and power-assisted pedal cycles with wireless charging stations. Utilizing WiTricity's wireless charging technology, the system provides zero-emission transportation solutions for campuses, tourist spots, and urban areas. In just six months of operation, LocoBike has demonstrated impressive results, serving over 10,000 users and generating 14,600 kWh of clean energy. The environmental impact includes preventing 6 tons of CO<sub>2</sub> emissions, saving 900L of fuel, reducing NOx emissions by 30kg, and decreasing noise pollution by 2-3 dB in scenic areas. The system has achieved operational cost savings of ¥250,000-300,000, created 17 new jobs, and increased tourist exploration time by 15%.

Compared to traditional systems, it offers 40% longer battery life than conventional bike-sharing and requires 60% less maintenance than shuttle buses. The infrastructure incorporates solar-powered stations with 55-inch displays and 5 kWh lithium iron phosphate batteries for daily operations and emergency power. The fleet includes 22kg e-scooters with 45km range and 25kg PAPCs with 50km range, both maintaining a maximum speed of 25km/h.

Through partnerships with Shell and Join Energy Co. Ltd, LocoBike has established operations in Chengdu, Leshan, and Jinan, while also developing a significant project in Taiwan with Shell, TennRich International Corp., JJPlus, and Yulon Motor. Looking ahead, LocoBike plans to expand its presence in Greater Bay Area, Chengdu, Taiwan and Japan markets. By combining solar power, wireless charging, and smart mobility solutions, LocoBike is making substantial contributions to zero-carbon emission goals for 2030 and beyond while delivering measurable environmental and economic benefits to communities.



### Comments from Judging Panel

This solution is equipped with solar-powered wireless charging stations that use renewable energy for carbon reduction. This will encourage more people to adopt sustainable modes of transportation, ultimately improving air quality and reducing noise pollution, thereby contributing to environmental ecology.

### LocoBike

LocoBike以太陽能微出行系統革新城市交通，將電動滑板車與助力車結合太陽能無線充電站，提供校園、旅遊景區和園區零碳排放的交通解決方案。系統使用WiTricity無線充電技術，在運營僅六個月內，已服務超過10,000名用戶，產生14,600千瓦時的清潔能源。有助6噸二氧化碳排放、節省900升燃料、減少30公斤氮氧化物排放，並在景區降低2-3分貝噪音污染環境效益顯著。此外，LocoBike節省了¥250,000-300,000的運營成本，創造17個就業機會，並使遊客探索時間增加15%。

與傳統系統相比，LocoBike的電池壽命較共享助力車延長40%，維護需求較穿梭巴士減少60%。其基礎設施包括配有55英寸顯示屏和5千瓦時磷酸鐵鋰電池的太陽能充電站，用於日常運營及應急供電。車隊由22公斤、續航45公里的電動滑板車和25公斤、續航50公里的電動助力車組成，兩者最高時速均為25公里。

通過與Shell及Join Energy Co. Ltd合作，LocoBike已在成都、樂山和濟南展開業務，並在台灣與Shell、天瑞企業、捷佳及裕隆汽車集團進行試點項目。展望未來，LocoBike計劃擴展業務至大灣區、成都、台灣及日本市場。結合太陽能、無線充電與智慧移動，LocoBike為2030年零碳排放目標做出貢獻，並帶來顯著的環境與經濟效益。



### 評審委員會評語

作為微型出行網絡，該方案配備了太陽能無線充電站，利用可再生能源進行碳減排。這將鼓勵更多人採用可持續的交通出行方式，長遠而言改善空氣質量並減少噪音污染，為環境生態出一份力。



# Smart Mobility (Smart Tourism) Bronze Award 智慧出行 (智慧旅遊) 銅獎

**Lincogn Technology Co. Limited**  
**嶺勤科技有限公司**  
[www.yoswit.com](http://www.yoswit.com)

## Yoswit's Smart Hotel System

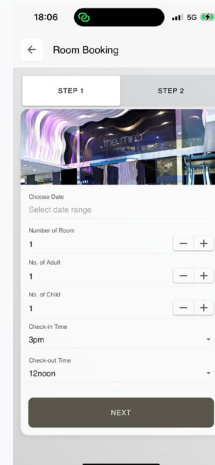
Yoswit's Smart Hotel System seamlessly integrates AI technology with intelligent room systems. This innovative feature allows guests to control electrical devices in the room, including lights, TV, curtains, and air conditioning, through an AI chatbot. Guests can also inquire about hotel information, order room service, and access travel information. The system monitors room conditions through high-precision human and environmental sensors. It uses AI for data analysis to precisely manage the switching of lights, TV, and adjust the temperature of the air conditioning. Additionally, the system records guests' usage habits and can pre-set the temperature and recommend relevant room services for their next stay. By combining Yoswit's smart hotel equipment and system algorithms, it not only provides a new check-in experience for guests but also helps hotels improve customer service and energy efficiency.

Yoswit also applies AI technology to guest registration and room service. Residents can handle pre-registration through a mobile application. The system analyses facial recognition, OCR, and location information to assist guests in completing the check-in process in advance, saving guests time and hotel front desk work.



## Comments from Judging Panel

This is a comprehensive platform that effectively connects customers. Lincogn demonstrates innovative thinking across products, services, and solutions. Customers enjoy a more comfortable accommodation experience by leveraging AI technology, while hotels simultaneously enhance service quality.



## Yoswit智能酒店系統

Yoswit智能酒店系統結合AI科技與智能客房系統結合。這項創新功能讓住客可透過人工智能聊天機器人控制房間內的電器設備，包括燈，電視，窗簾及冷氣。住客亦可查詢酒店的各項資訊，訂購客房服務及查詢旅遊資訊。系統亦會透過高精度的人體及環境傳感器，監測房間內的狀態。並透過AI進行數據分析，精確管理客房內燈，電視等設備的開關和冷暖氣溫度的調節。同時系統亦會紀錄住客的使用習慣，在住客下一次入住酒店時，提前設定好相應的溫度及推薦相關的客房服務。通過結合Yoswit的智能酒店設備和系統演算，不僅可以為住客提供嶄新的入住體驗，同時亦幫助酒店提高客戶服務及節省能源的效率。

Yoswit亦都將AI科技應用至住客登記及客房服務當中。住戶可透過手機應用程式辦理預先登記。系統會透過人面識別，OCR及定位資訊進行分析，幫助住客提前辦理入住手續，從而節省住客的時間及酒店前台的工作。



## 評審委員會評語

這是一個有效連接客戶的全方位平台。Lincogn無論是在、產品、服務到解決方案都展現創新思維。客戶透過利用AI科技享受更舒適的住宿體驗，而酒店亦同時提升服務質量。

# Smart Mobility (Smart Tourism) Certificate of Merit 智慧出行 (智慧旅遊) 優異證書

## Ctrip Corporate Travel Holding (Hong Kong) Limited 攜程商旅控股 (香港) 有限公司

www.trip.biz

### Digital Business Travel Solution

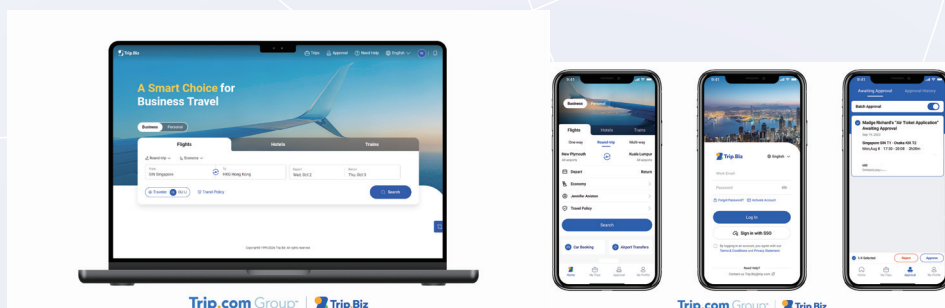
Trip. Biz is a Digital Travel Management Company (TMC) powered by Trip.com Group. their mission is to evolve the industry in pursuit of the business trip. their vision is to become a leading global TMC, and they value “technology empowers people”. Trusted by over 15,000 large-scale corporations and more than 1,000,000 SMEs globally.

The mission “Save on travel, go for business” shows their commitment to providing “Digital Business Travel Solution” for enterprises. They help companies streamline travel management, optimize costs, and enhance efficiency, supporting their digital transformation journey.

Their platform combines human-centric technology, rich inventory, professional & experienced customer service, and sustainable solutions, all on one platform to streamline business travel needs. AI-driven booking systems, real-time data analytics, and mobile applications provide seamless travel experience.

【Trip.Biz OBT & APP】Empowers business travelers and travel managers with an efficient, secure, and convenient online booking experience, featuring instant changes, instant messaging (IM), real-time policy compliance reporting, approval management processes, and safety alerts with emergency services.

【Rich inventory】Offers a wide range of options for flights, hotel accommodations, and ground transportation, including trains and car rentals. Their accommodations cover 230 countries and regions. For flights, they connect to 4 major GDS and partner with over 50 airlines and 20 NDCs, along with train services in China, Europe, and Korea.



### Comments from Judging Panel

The solution is well-designed and fully considers the overall process for business travel users, demonstrating significant development potential.



### 數位商旅解決方案

Trip.Biz是攜程集團 (Trip.com Group) 旗下針對國際市場的商旅管理品牌，通過數字一體化的商旅解決方案，助力企業管理差旅。Trip.Biz的使命是為了追求商務旅行而推動行業發展，願景是成為全球領先的TMC。Trip.Biz受到超過15,000家大型企業和超過1,000,000家中小企業的信賴。

“數碼商務旅遊解決方案”的使命，是“Save on travel, go for business”透過協助公司簡化差旅管理流程、優化成本並提升效率。

Trip.Biz結合了以人為本的科技、豐富的差旅資源、專業且經驗豐富的客戶服務以及可持續的方案，集成在一個平台上，以簡化商務旅行需求。AI驅動的出行預訂系統、實時數據分析和移動應用程序。

【Trip.Biz OBT & APP】科技賦能為商務旅客和差旅管理者提供高效、安全、便利的在線預訂體驗，包括即時更改、即時對話服務 (IM)、政策合規實時報告、審批流程及安全警報和緊急服務功能。

【一站式商旅資源】豐富的機票、酒店住宿和地面交通 (火車、用車) 資源。住宿資源覆蓋全球230個國家和地區。機票方面，直連四大GDS系統，與超過50家航空公司和20多個NDC合作，還提供中國、歐洲和韓國的鐵路資源。

### 評審委員會評語

該解決方案設計完善，充分考慮了商務旅行用戶的整體流程，具有很大的發展潛力。

# Introduction of Leading Organiser 籌辦機構簡介



## About GS1 Hong Kong

Founded by the Hong Kong General Chamber of Commerce in 1989, GS1 Hong Kong is the local chapter of GS1®. GS1 Hong Kong's mission is to empower businesses of their digital transformation, improve supply chain visibility and efficiency, ensure product authenticity, facilitate commerce connectivity and enable sustainable value chain through the provision of global supply chain standards (including GTIN & barcodes), and a full spectrum of platforms, solutions and services.

GS1 Hong Kong currently supports close to 8,000 corporate members from 20 sectors including retail & consumer packaged goods, food & beverage and food services, healthcare, apparel & footwear, logistics & ICT. By working closely with communities of trading partners, industry organizations, government, and technology providers, we can foster a collaborative ecosystem, paving the way for "Smarter Business, Better Life".

As a non-profit organization, GS1 develops and drives global adoption of supply chain standards. Headquartered in Brussels, Belgium, GS1 has over 115 national chapters in 150 countries.

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## 關於香港貨品編碼協會

香港貨品編碼協會(GS1 HK)於1989年由香港總商會成立，是GS1®環球組織的香港分會，提供全球供應鏈標準(包括產品編碼及條碼)及一系列相關平台、解決方案及服務，助企業數碼化，提升供應鏈透明度及效率、確保產品真確性、促進線上線下貿易及推動可持續價值鏈。

GS1 HK目前有近 8,000名企業會員，涵蓋約20種行業，包括零售消費品、食品及餐飲、醫療護理、成衣、物流及資訊科技。本會與各貿易夥伴、業界組織、政府及資訊科技公司積極建立協作生態，實踐「智能商貿，優質生活」的願景。

GS1®是一家提供全球供應鏈標準的非牟利組織，總部位於比利時的首都布魯塞爾，擁有超過115個分會，遍及全球150個國家。

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