



HONG KONG  
ICT AWARDS  
2015 香港資訊及  
通訊科技獎

# Best Innovation Award 最佳創新獎



Organiser  
主辦機構

**HKIE** THE HONG KONG  
INSTITUTION OF ENGINEERS  
香港工程師學會

Information Technology Division  
資訊科技分部





# Contents 目錄

Background 背景	1
Message from Chairman 主席獻辭	2
Hong Kong ICT Awards 2015: Best Innovation Award Judging Panel 2015香港資訊及通訊科技獎：最佳創新獎評審委員會	3
Hong Kong ICT Awards 2015: Best Innovation Grand Award 2015香港資訊及通訊科技獎：最佳創新大獎	4
Dragon Creative Enterprise Solution Ltd. (Subsidiary of Mad Mad Group) 創龍企業解決方案有限公司（邁豐集團子公司）	MAD Glass MAD智能眼鏡
Hong Kong ICT Awards 2015: Best Innovation (Entrepreneurial Innovation) Award 2015香港資訊及通訊科技獎：最佳創新（企業創新）獎	4
Gold Award 金獎	4
Dragon Creative Enterprise Solution Ltd. (Subsidiary of Mad Mad Group) 創龍企業解決方案有限公司（邁豐集團子公司）	MAD Glass MAD智能眼鏡
Silver Award 銀獎	6
Green-i Sim Motion (HK) Co. Ltd. 綠色移動通訊（香港）有限公司	i-Sim Card i-Sim 開心智能電話卡
Bronze Award 銅獎	7
VHSoft Technologies Co. Ltd. 緯衡科技有限公司	VHSmart™ Mobile Management System 出勤寶智能流動管理
Hong Kong ICT Awards 2015: Best Innovation (Green ICT Innovation) Award 2015香港資訊及通訊科技獎：最佳創新（綠色資訊科技創新）獎	8
Certificate of Merit 優異證書	8
Environment Section, Projects Management Office, Projects Division, MTR Corporation Ltd. 香港鐵路公司工程處工程管理辦公室環境組	Tree Management System 樹木數據管理系統
Hong Kong ICT Awards 2015: Best Innovation (Innovative Technology) Award 2015香港資訊及通訊科技獎：最佳創新（科技創新）獎	9
Gold Award 金獎	9
Single Person Transport Design (SPTD) Ltd.	MoBiLET 天行健
Silver Award 銀獎	10
The Hong Kong University of Science and Technology (Conglei SHI, Qing CHEN, Siwei FU, Huamin QU) 香港科技大學 (石叢磊 / 陳晴 / 傅四維 / 屈華民)	VisMOOC: Visual Analysis of Massive Open Online Courses (MOOCs) VisMOOC：大型開放式網絡課程（慕課） 的在線可視分析系統
Bronze Award 銅獎	11
LEUNG Chi Wang 梁志宏	TinyBoy 3D Printer TinyBoy 3D 打印機
Certificate of Merit 優異證書	12
Boxland Hong Kong Ltd. 電子盒香港有限公司	iR-Furniture (Intelligent Retail Furniture) 雲端智能傢俬
List of Special Mention 特別嘉許列表	13
Introduction of Organiser 主辦機構簡介	14
Acknowledgement 鳴謝	15



# Best Innovation Award 最佳創新獎



## Background

### 背景

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

The Hong Kong ICT Awards was established in 2006 with the collaborative efforts of the industry, academia and the Government. Steered by the Office of the Government Chief Information Officer, and organised by 10 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 10 categories under the Hong Kong ICT Awards 2015. There is one Grand Award in each category, and an "Award of the Year" is selected from the ten Grand Awards by the Grand Judging Panel.

The Hong Kong Institution of Engineers - Information Technology Division is appointed as the leading organiser of the HKICT Awards 2015 for the Best Innovation category. Under this award category, there are three streams, namely, the Entrepreneurial Innovation, the Innovative Technology and the Green ICT Innovation. With an aim to raise awareness of the importance of ICT innovation and research, the awards under this category are presented to the most innovative and quality ICT researches and invention.

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應用和解決方案，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，滿足企業和營運需要，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政府資訊科技總監辦公室策動，並由十個香港業界組織及專業團體主辦，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。

2015香港資訊及通訊科技獎設有十個類別的獎項。每個類別均設有一個大獎，而最終評審委員會再從所有大獎中甄選出「全年大獎」。

香港工程師學會資訊科技分部十分榮幸獲委任為「2015香港資訊及通訊科技獎：最佳創新獎」之主辦機構。今年，最佳創新獎設有三個獎項類別，分別是企業創新、科技創新及綠色資訊科技創新。通過頒發獎項，表揚創新和優質的資訊及通訊科技研究及發明，並推廣科技創新的重要性及科學研究的精神。





## Message from Chairman

### 主席獻辭



Information Technology Division  
資訊科技分部



Ir Dr Ng To-ye, Vincent  
Chairman, IT Division  
The Hong Kong Institution of Engineers  
吳道義博士工程師  
香港工程師學會資訊科技分部主席

The winners of the Hong Kong ICT Awards 2015: Best Innovation Award have been selected from many entrants after rigorous vetting by assessment and judging process. On behalf of the Information Technology Division of the Hong Kong Institution of Engineers, I would like to congratulate the winners. Their effort and contribution to the information and communications sector can entrench our position in global.

The Information Technology Division of the Hong Kong Institution of Engineers is honoured to host the Hong Kong ICT Awards 2015: Best Innovation Award on behalf of the Office of the Government Chief Information Officer (OGCIO) of the HKSAR Government. The Best Innovation Award aims to raise awareness regarding the importance of ICT innovation and research, to recognise the accomplishments of individuals, companies or organisations that provide innovative solutions utilising ICT, and to present the awards to the most innovative and highest quality ICT researches and inventions. The standard and quality of the nominated entries are very impressive. It proves that the participants are committed to delivering innovative ICT solutions for their target groups.

In addition, I would like to express my sincere gratitude to our supporting organisations, and to thank our project committee members – Project Director, Ir Dr Ng Chak Man and Chief Assessor, Professor Lee Kin Hong. I would also like to express our deepest appreciation to the prestigious assessors and judges in devoting their precious time out of their busy schedules to make this Award a great success.

Finally, I would like to express again my whole-hearted congratulations to the winners for their great achievements and thanks to all participants. With more efforts from the industry, we hope that the development of ICT in Hong Kong can be further fostered. We look forward to have more outstanding entries next year, making the Awards become one of the most prestigious ICT events in Hong Kong.

「2015年香港資訊及通訊科技獎：最佳創新獎」經過嚴謹的遴選及評審程序，各獎項之得主終於從眾多的參賽者中脫穎而出，我謹代表香港工程師學會資訊科技分部祝賀所有優勝者，他們的努力和對資訊及通訊科技的貢獻，令香港在全球資訊及通訊科技界的地位更進一步。

香港工程師學會資訊科技分部十分榮幸能繼續代表政府資訊科技總監辦公室主辦「2015年香港資訊及通訊科技獎：最佳創新獎」。「最佳創新獎」旨在推廣科技創新的重要性及科學研究的精神，鼓勵在資訊及通訊科技研究及發明方面提出創新解決方案的個人、公司及機構，並頒獎表揚他們的成就。今年獲提名作品的水準和質素都相當高，令人印象深刻，可見參賽者都致力為他們的服務對象提出具創意和創新的資訊及通訊科技方案。

在此，我謹代表香港工程師學會資訊科技分部感謝所有支持機構、籌委會成員項目總監伍澤文博士工程師及首席評審員李健康教授。此外，我亦要衷心感謝一眾評判及評審員，全賴他們在百忙中撥冗協助，才能令今屆比賽得以成功及圓滿舉行。

最後，我再次衷心祝賀所有的得獎者獲得驕人成績，和多謝各參賽者踴躍參與，並希望業界的朋友繼續努力，推動香港的資訊及通訊科技不斷進步，期望明年見到更多出色的參賽作品，令「香港資訊及通訊科技獎」成為業界其中一項最享負盛名的活動。



## Hong Kong ICT Awards 2015: Best Innovation Award Judging Panel

### 2015香港資訊及通訊科技獎：最佳創新獎評審委員會



#### From right to left :

**Prof YUE OnChing**  
Science Advisor, Innovation and Technology Commission,  
The Government of HKSAR /  
Adjunct Professor, The Chinese University of Hong Kong

**Ir Prof Horace IP**  
Vice-President (Student Affairs) & Chair Professor of Computer Science,  
City University of Hong Kong

**Mr Andy BIEN**  
Chief Information Officer, Airport Authority Hong Kong

**Ir Ted SUEN**  
Head of Information Technology, MTR Corp.

**The Hon Nicholas YANG**  
Former Executive Vice President, The Hong Kong Polytechnic University

**Ir Dr George SZE**  
Managing Director, Systems Integrators (Asia) Ltd.

**Mr Mullar WAN**  
General Manager (Information Technology), The Hongkong Electric Co. Ltd.

**Prof LEE Kin-hong**  
The Chinese University of Hong Kong

**Mr SUN Nan**  
Popularisation of Science and the Institute Minister,  
Shenzhen Association for Science and Technology

**Mr Herman LAM**  
Chief Executive Director, Hong Kong Cyberport Management Co. Ltd.

#### 由右至左：

**余安正教授**  
香港特別行政區政府創新科技署科學顧問 /  
香港中文大學兼任教授

**葉豪盛教授工程師**  
香港城市大學副校長（學生事務）及電腦科學系  
講座教授

**卞家振先生**  
香港機場管理局首席資訊主管

**孫耀達工程師**  
港鐵公司資訊科技主管

**楊偉雄議員**  
香港理工大學前任行政副校長

**施禮華博士工程師**  
施理嘉電腦訊息有限公司董事總經理

**尹偉堅先生**  
香港電燈有限公司資訊科技總經理

**李健康教授**  
香港中文大學

**孫楠先生**  
深圳市科學技術協會科普和學會部部長

**林向陽先生**  
香港數碼港管理有限公司行政總裁



## Best Innovation Grand Award and Best Innovation (Entrepreneurial Innovation) Gold Award

## 最佳創新大獎 及最佳創新(企業創新)金獎

Dragon Creative Enterprise Solution Ltd.  
(Subsidiary of Mad Mad Group)

創龍企業解決方案有限公司 (邁灃集團子公司)

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



創龍企業解決方案有限公司  
DRAGON CREATIVE ENTERPRISE SOLUTION LIMITED

### MAD Glass

MAD Glass is a smart glass designed and marketed by Dragon Creative Enterprise Solution Ltd., a subsidiary of Mad Mad Group. It runs Android mobile operating system.

MAD Glass includes all the functions of a smartphone. It can make phone calls, text friends, send multimedia to contacts, access personal digital assistant, play media, use GPS navigation, run third party applications, take photos or record videos with the camera, web browsing with broadband internet, use Wi-Fi and make payment online, etc.

### MAD智能眼鏡

MAD智能眼鏡是邁灃集團旗下的創龍企業解決方案有限公司研發的智能眼鏡系列，它以安卓手機作業系統運作。

MAD智能眼鏡具備一般智能手機的功能，如打電話、發送文字或多媒體信息、使用掌上型PDA、GPS導航、媒體播放、第三方應用程式、拍照或錄製影片、瀏覽網頁、使用Wi-Fi和在線付款等。





MAD Glass can be used through gesture and voice control with high recognition by motion and voice sensors embedded, as if it is part of the body. Users can release hands for other business with a clear vision, rather than holding the smartphones, bending heads down and hurting necks.

The mission of the company is to improve the experience of general users and increase the value of clients' marketing for business by transforming tradition 2D graphics to 3D views. With a user-friendly specification, well-designed outlook, high resolution, long battery life, high compatibility and competitive price, MAD Glass is a gadget that targets to change the way of using smartphone.

MAD Glass can bring special experience to users. Augmented Reality (AR+) is a live direct or indirect view of physical, real-world environment whose elements are augmented by a computer-generated sensory input such as sound, video, graphics or GPS data. With the help of AR+ technology used in the MAD Glass, the information about the surrounding real world of the user becomes interactive and digital. Texts, images, audios, videos and 3D animations pop up when the user looks at specified objects with the MAD Glass.

The automatic AR+ application generating platform, Auto MAD AR+, can help users make their own AR+ application as simple as managing Facebook even without technical knowledge. Simply upload the materials to the platform and AR+ application will be ready in 30 minutes for free. MAD Glass has a dedicated online store, MADMAD Store, which enable users getting variety of applications. MADMAD Store is compatible with most of the Android applications available in market. Users of Auto MAD AR+ can upload their applications to the Store as well.

## Comments from Judging Panel

### 評審委員會評語

This project uses android system embedded in MAD Glass. It aims to totally replace the smart phone in the future. This innovative product is in direct competitions with giant players such as Google, Sony and Meta Pro. It also has market potential with the AR UGC platform, which can render AR apps.

其內置的人體及聲音感應器，能讓用戶以動作及語音操作 MAD 智能眼鏡，猶如身體的一部分。用戶不但可以騰出雙手來處理其他的工作，更能夠抬起頭做人，不用再「低頭族」。

公司把傳統的平面圖像以三維視覺去改善大部分個人客戶的體驗和提升商業客戶的市場價值。MAD 智能眼鏡具備便於使用的規格，精心設計的外觀，高像素的圖像解析度，較長的電池壽命，高兼容性及具競爭力之價格，令它可以改變使用智能手機的習慣。

MAD 智能眼鏡可以為用戶帶來獨特的體驗。增強現實 (AR+) 是反映物理實體與真實環境的直接或間接的影像，影像中實體與環境的相關元素，被電腦生成的感應輸入而增強，如聲音、圖像或 GPS 數據。透過 MAD 智能眼鏡所應用的增強現實 (AR+) 技術，可以讓文字、圖像、聲音及影像以動畫呈現眼前，應用程式的內容亦變得有趣和互動。

配合 MAD 智能眼鏡使用的自動 AR+ 快速生成平台，方便用戶製作 AR+ 應用程式，不需要專業的技術知識，就如使用面書般簡便。只需將資料上傳至平台，AR+ 應用程式便可在 30 分鐘內完成，費用全免。MAD 智能眼鏡的專屬網上商店 MADMAD 商店，可以讓用戶下載各種程式，而 MADMAD 商店亦兼容市面大部份的安卓應用程式，同時用戶亦可以上傳他們的應用程式到商店。

本項目採用安卓作業系統嵌入 MAD 智能眼鏡，目的是要在將來完全取代智能手機。這個創新產品的直接競爭對手都是市場上的龍頭品牌，如谷歌、索尼和 Meta Pro 等。其自動快速生成平台，可以製作 AR 應用程式，令 MAD 智能眼鏡具有一定的市場潛力。





## Best Innovation (Entrepreneurial Innovation) Silver Award 最佳創新(企業創新)銀獎

Green-i Sim Motion (HK) Co. Ltd.  
綠色移動通訊(香港)有限公司

www.i-sim.com.hk



### i-Sim Card

"i-Sim Card" is the first smart phone card in the world that provides talk and mobile data connection services completely free of charge, providing tourists with a new "tourist telecommunications" service. With patented technology, tourists simply collect the "i-Sim Card" in the designated distribution points, download "i-Sim APP" and complete a simple registration process, and then can enjoy the free top-up to the "i-Sim Card" in use by watching their favourite advertisements and tourist information available in "i-Sim APP".

This mode of "payment by merchants" in replacement of the existing "payment by users" habit will revolutionise the tourism and telecommunications industries. This will also transform users' previous mode of "passively" receiving commercial advertisements to the "proactively" click-and-watch approach. This is not only user-friendly to tourists, but also matches the focused target customer group to merchants. The diversified and mobile one-stop advertisement platform also creates new business opportunities for the telecommunications, tourism, and retail industries, a win-win situation for all parties.

### i-Sim 開心智能電話卡

「i-Sim 開心智能電話卡」是全球首創提供完全免費通話及流動上網數據的電話卡，為旅客提供全新「旅遊電訊」服務。透過專利技術，旅客只需在指定派發點領取「i-Sim 開心智能電話卡」及下載「i-Sim 開心APP」進行簡單註冊，以觀看APP內的廣告及旅遊資訊替使用中的 i-Sim Card 無限免費充值。

此服務引入「商家付費」模式，改變「用家自付」的習慣，為旅遊業及電訊業帶來改變。亦由過往用家「被動式」轉化成「主動式」觀看廣告資訊。便利旅客之餘，亦精準地配對了商家及其目標客戶群，提供一個多元化及流動的一站式廣告平台，為電訊業、旅遊業及零售業創造新商機，創造多贏局面。



### Comments from Judging Panel

#### 評審委員會評語

This is a creative implementation of providing SIM card free-of-charge to frequent inlands travellers aiming to tackle their needs of short term mobile communications. The business model is B2B (with the carriers) and B2C (to the travellers). The revenue model is built on SIM card user clicking on advertisements. The idea is challenging since the government, hotels and restaurants in Hong Kong often provide free Wi-Fi services. Nevertheless, the idea is innovative and would be welcome by tourists visiting Hong Kong.

「i-Sim 開心智能電話卡」為經常訪港的內地旅客提供免費智能電話服務，旨在解決他們在港使用流動電話通訊的短期需要，方案的設計具創意。其商業模式分別為針對電訊運營商的企業對企業方式（B2B），以及針對旅客的企業對顧客方式（B2C），並以用戶點擊廣告作為其收入模式。由於本地政府、不少酒店和餐廳都提供免費Wi-Fi服務，令這個方案增加挑戰性。然而，這個創新的意念相信會受到訪港旅客的歡迎。



# Best Innovation (Entrepreneurial Innovation) Bronze Award 最佳創新(企業創新)銅獎

VHSoft Technologies Co. Ltd.

緯衡科技有限公司

www.vhsoft.com



## VHSmart™ Mobile Management System

VHSmart™ is an integrated mobile solution for construction management. Through the use of this innovative mobile solution and cloud technology, project team can easily achieve Quality, Smart, Security and Safety (Q3S) in site quality management.

The Cloud Dashboard provides a real-time platform for users to strengthen inspection result analysis and progress monitoring.

VHSmart™ Inspection facilitates site inspection and progress checking. VHSmart™ Annotator helps annotate site photos to indicate defects.

VHSmart™ Safety allows update and review of workers' training records. On-site trainings can also be performed to reduce site accident rate.

VHSmart™ Asset Management, together with the use of RFID tag or QR code, enables assets registration, certificates and permits renewal, checking of expiring dates and system alert.

## 出勤寶智能流動管理

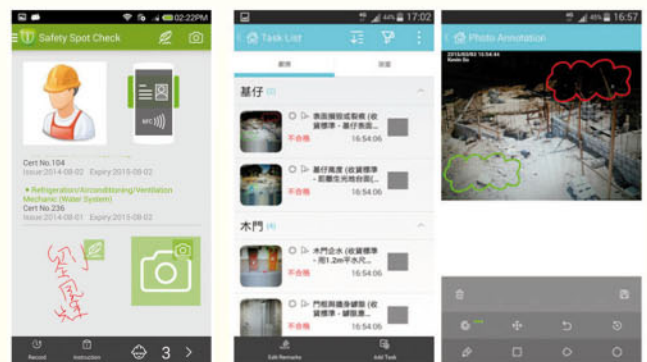
「出勤寶智能流動管理」是一個一站式智能工地管理方案，通過使用創新的流動方案和雲端技術，令工作團隊在管理上實現智能化、高質量、具有安全保障的工程質量監控（即Q3S）。

雲端檢驗資料庫提供了一個平台給用戶作實時狀態更新及檢驗報告的監測與分析。

用戶可以透過智能手機即時跟進工程進度，記錄檢測報告，並即時上載至雲端平台用作分享及發送給其他人跟進，提高管理效率。

管理系統還可以即時查閱工人訓練記錄，提供安全訓練及記錄安全事件，大大提高工人安全意識及減低工地意外傷亡率。

資產管理系統透過應用無線射頻識別技術（RFID）及二維條碼技術（QR CODE），即時查閱及更新設備狀況，如設備證書和許可證，更可主動提醒設備更新日期。



## Comments from Judging Panel

### 評審委員會評語

This implementation is to use existing technologies and apply them collectively in the mobile solution of construction management. Mobility is the key ingredient for the implementation. Usage is currently limited to construction industry. Implementation improves workflow, turn-around times and recording of on-line project status.

這個方案集合現有的技術以流動模式應用於工地管理，實施的關鍵因素取決於其流動性。目前，這個方案的使用範圍僅限於建築行業，能有助改進工作流程、周轉時間及在線記錄項目的進度。



## Best Innovation (Green ICT Innovation) Certificate of Merit

# 最佳創新(綠色資訊科技創新)優異證書

Environment Section, Projects Management Office,  
Projects Division, MTR Corporation Ltd.

香港鐵路公司工程處  
工程管理辦公室環境組

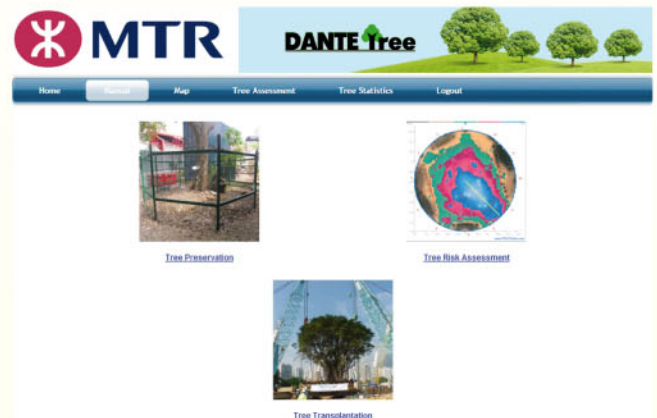


### Tree Management System

Full compliance in tree conservation, effective management and communication of tree conservation performance is of crucial importance for MTR. Tree Management System is a web-based platform, which is a seamless integration of domain knowledge & technologies with a build-in local arboricultural knowledge and experience. It provides an audit trail to tree health data and facilitates tree health analysis for risk evaluation. It also provides alerts to managers as well as frontline staff automatically for appropriate actions. The system has been adopted in MTR since 2012.

### 樹木數據管理系統

港鐵公司於2012年開發了樹木數據管理系統，以提高受工程影響樹木的管理效率，令樹木保育工作能夠完全達到技術指引的標準。本系統是一個網上操作平台，透過網絡科技，把工程樹木數據、本地樹藝知識和經驗無縫結合，方便不同專業的管理人員和前線人員追蹤樹木的病歷、及時處理有風險的樹木和改善樹木健康。



### Comments from Judging Panel

#### 評審委員會評語

This project can help to reduce risk of falling trees that may cause fatal injuries. The data collection part is mainly manual with the tracking application at the backend.

這項目採集了樹木的數據，再配合追蹤應用程式而使用，有助減少樹木因倒塌而造成致命傷害的風險。



# Best Innovation (Innovative Technology) Gold Award 最佳創新(科技創新)金獎

## Single Person Transport Design (SPTD) Ltd.

www.1ptd.com



### MoBiLET

**Mobile Bi-wheel Light Electronic Transport (MoBiLET)** pronounced 'mobility' is a re-imagination of transport for the physically challenged.

Increasing the mobility of physically challenged people, raising their eye-level, personalising their technology, all MoBiLET design goals are enhancing their employability, living standards and social interaction.

As an ICT innovation, MoBiLET represents an example of making use of computing techniques to create a previously impossible physical device, and connecting a physical device with mobile phones, and hence to the internet. This enables other ICT applications.

MoBiLET balances on two wheels, allowing it to rotate in a circle of 70cm, saving space, compared to the 150cm turning circles of traditional electric wheel chairs.

MoBiLET is light and agile, weighing around 50kg, much less than the weight of traditional electric wheelchairs. The mechanical design of MoBiLET is simple, parts can be easily replaced and maintenance is easy.

A special feature of the MoBiLET is its built-in control system to maintain balance, even when the wheelchair goes up a slope.

### 天行健

「天行健」英文名字為 **Mobile Bi-wheel Light Electronic Transport (MoBiLET)**，發音為“mobility”——一項為方便殘疾人士行動的新構思。

「天行健」的設計理念：為殘疾人士提昇自我價值、克服流動性限制、提昇就業能力和生活質素。

傳統電動輪椅體積頗大和笨重，難以在工作環境中廣泛使用，令推廣傷健人士重投社會面對不少困難。作為一項資訊及通訊科技的創新發明，「天行健」把物理裝置及通訊節點有效連接。

傳統輪椅需要150厘米作自轉直徑，「天行健」兩輪平衡方案則只需要少於70厘米，有效減少使用輪椅時佔用的空間。

「天行健」輕盈靈活，重量只有約50千克，遠少於傳統輪椅，而且機械設計簡單，零件易於更換及維修。

「天行健」最具特色之處，在於其內部調控機械可以令使用者在斜坡上保持平衡並安全移動。



### Comments from Judging Panel

#### 評審委員會評語

This product is useful in Hong Kong especially when the population is growing day-by-day in conjunction with the limited living space environment. MoBiLET is a self-balancing in two-wheel wheelchair that can maneuver in narrow spaces. Also MoBiLET is designed to balance itself while moving up / down slope by tilting at different angles for slope angular compensation. It is a good application of technology in a digitalised wheelchair to improve the quality of life of disabled people.

香港人口不斷增長，加上有限的生活空間，令這個產品特別適用於本地環境。「天行健」是一個自平衡的兩輪輪椅，可以在狹窄的空間操作。同時，產品可以在上 / 落斜坡時調節角度以補償路面的傾斜度，達至自行平衡。此方案優異之處在於將科技應用於設計數碼化的輪椅，幫助傷健人士改善生活質素。





## Best Innovation (Innovative Technology) Silver Award 最佳創新(科技創新)銀獎

The Hong Kong University of Science and Technology  
(Conglei SHI, Qing CHEN, Siwei FU, Huamin QU)

香港科技大學

(石叢磊 / 陳晴 / 傅四維 / 屈華民)

<http://vis.cse.ust.hk/vismoooc>



### VisMOOC: Visual Analysis of Massive Open Online Courses(MOOCs)

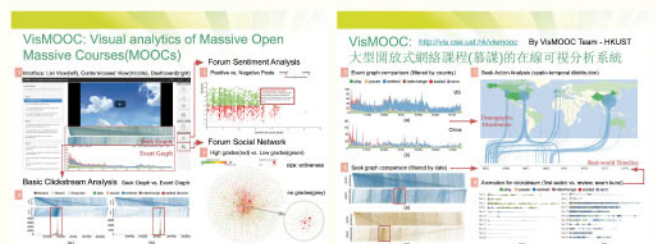
Massive Open Online Courses (MOOCs) are growing at an unprecedented speed, attracting millions of students from all over the world. Almost all major MOOC platforms can record data such as clickstream data, forum data, and the grading data. Such large-scale data provides a great opportunity for instructors and educational analysts to gain insight into online learning behaviours. Nevertheless, the increasing scale and unique characteristics of the data also pose a challenge for effective data analysis.

VisMOOC is a visual analytic system that aims to help analyse learning behaviour by using data collected from MOOC platforms. By working closely with several MOOC instructors, the data can be understood and task analysis requirements can be collected. A complete user-centered design process is further employed to design and develop VisMOOC. The work has been presented in several e-learning seminars and received positive feedback from course instructors, education analysts, and key MOOC platforms such as Coursera and edX.

### VisMOOC: 大型開放式網絡課程(慕課)的 在線可視分析系統

近年，大型開放式網絡課程(慕課)蓬勃發展，吸引全球數以百萬計的學生。主流慕課平台記錄用戶在線學習數據，包括視頻點擊流，論壇數據，以及學生成績。然而，隨著數據規模的增加，如何高效分析並得出準確結果成為一大挑戰。

VisMOOC是針對在線課程學習數據進行可視分析的在線分析系統，旨在通過慕課平台上收集的數據分析學習行為。通過與多位慕課授課教師的合作，對實際需求進行調查及研究並設計實現了VisMOOC系統。VisMOOC在多個在線教學研討會上展示過，得到授課教師、教育專家、以及當前兩大慕課平台Coursera與edX的好評。



### Comments from Judging Panel

#### 評審委員會評語

This project is based on analysis on captured human behaviour of clickstream captured from MOOC platform. The analysis provides indications of the students' understandings and the quality of the lecture online. The analysis is based fundamental conclusions. The project may offer indicative analysis but may need to use with other means of data capture in order to provide a comprehensive analytical results.

此項目是根據MOOC平台收集到的點擊流數據，對使用者的行為進行分析。有關分析就學生對課程的理解及課程的質素提供了指引。此項目可以提供指標性的分析，然而仍須配合其他方法採集到的數據，以得出更全面的分析結果。



# Best Innovation (Innovative Technology) Bronze Award 最佳創新(科技創新)銅獎

LEUNG Chi Wang

梁志宏

www.tinyboy.net



## TinyBoy 3D Printer

With the popularity of 3D printers and maker culture, more and more schools have acquired 3D printers for the use in classes. However, because of slow printing speed, cost and maintenance issues, 3D printers available for learning in classes are not common. In view of this, an open-source 3D printer named Tinyboy project which is designed for education purpose has been rolled out so that students can enjoy learning with the machine.

To encourage the learners not just to consume, but to become makers, Tinyboy 3D printer can be assembled by students with simply a screwdriver. The maximum dimension of the printed object is 8x8x8cm. The printer is designed to be small for multiple deployments in classroom so that students can easily print out their creative ideas.

## TinyBoy 3D 打印機

隨著3D打印機日漸普及，加上自行設計、自己制作的自造者文化逐漸流行，已有不少學校添置了3D打印機供課堂使用。然而，受制於緩慢的打印速度、不太便宜的價錢、以及維護的難度，學生在課堂上使用3D打印機的機會少之又少。有見及此，一項以Tinyboy開源3D打印機的項目便應運而生，目的是為學界提供一台合適的機器，讓學生樂於學習。

有別於傳統一人講、多人聽的單向授課模式，學生透過自發的學習過程，自由創作及設計，並得到實物作為努力的成果，可以培養他們主動學習。Tinyboy 3D打印機以少即是多為設計理念，最大的打印尺寸為8x8x8厘米，只需一枝螺絲起子就能組裝起來，操作簡單，學生也可以輕易應付，設計者希望學生既能自行組裝，也能維護這台機器，在過程中讓學生建立自信及責任感。



## Comments from Judging Panel

### 評審委員會評語

The product is an impressive 3-dimensional small machine implemented in a cost effective ways of using and teaching 3D printers. The applicant shows strong passion to use the product to inspire younger generation.

此產品運用了具成本效益的方法，實現了使用三維打印機及相關的教學目的，令人印象深刻。參賽者亦充滿熱忱，希望透過產品激勵年輕一代去學習創作。





## Best Innovation (Innovative Technology) Certificate of Merit 最佳創新(科技創新)優異證書

**Boxland Hong Kong Ltd.**  
**電子盒香港有限公司**

www.boxland-hk.com



BOXLAND

### iR-Furniture (Intelligent Retail Furniture)

iR-Furniture is a technological solution that integrates sales, stock management, storefront operations and security into a stylish display case. Powered by RFID, iR-Furniture can record the movement of RFID-tagged products automatically. It enables retailers to investigate item and consumer behaviour. They can thus differentiate themselves via the personalisation of customers' experience and enhancement of operational efficiency in store.

Furthermore, iR-Furniture revolutionises the product information provisioning via enabling the stock visibility. A mobile application "SMART CONTRLLER" facilitates users to gain immediate access to the data and monitor the current status of the cloud based showcase through smart devices anytime and anywhere.

### 雲端智能傢俬

雲端智能傢俬是一項一插即用的無線射頻識別 (RFID) 產品，結合營銷、貨品管理與運作、防盜的智能展覽櫃，為零售業帶來發展。透過無線射頻識別技術，雲端智能傢俬可自動記錄附有無線射頻識別標籤產品的提取記錄。數據不僅可用於研究消費行為及設計個性化購物體驗，亦可加強營運效率。

此外，雲端智能傢俬改善了資訊傳送的流動性。應用程式 "SMARTCONTRLLER" 讓用戶從智能設備獲得即時數據及隨時隨地監控店內實時狀態。



-  Embed RFID
-  Cloud Solution
-  Plug-and-Play
-  Mobile monitoring
-  Collect Big Data
-  Security

**Successful Case:**



ISA Boutique



Memorigin

### Comments from Judging Panel

#### 評審委員會評語

RFID is not new in the market and this product is embedding RFID in furniture for the use of maintenance, monitoring and stock-takes of expensive merchandise. Similar products have been launched in the market. It has potential to minimise operational errors in the retail industry sales and inventory process.

這產品將已在市場上使用的無線射頻識別技術嵌入傢俬設計中，在高消費品市場中發揮保養、監測和庫存的作用。雖然市面上已有類似的產品，但它能幫助零售行業減少銷售和庫存過程中的操作失誤，仍然具有潛力。



## List of Special Mention

# 特別嘉許列表

### **Best Innovation (Entrepreneurial Innovation) Special Mention** 最佳創新(企業創新)特別嘉許

3DP Technology Ltd.  
三維打印科技有限公司

Delta Robot 3D Printer  
三角機械三維打印機

### **Best Innovation (Innovative Technology) Special Mention** 最佳創新(科技創新)特別嘉許

Division of Biomedical Engineering,  
Department of Electronic Engineering,  
The Chinese University of Hong Kong  
香港中文大學電子工程學系生物醫學工程

Computerised Cognitive  
Screening Assessment (CoCoSc)  
自助認知篩查系統





## Introduction of Organiser

# 主辦機構簡介



### Information Technology Division 資訊科技分部

The Hong Kong Institution of Engineers (HKIE) was set up in 1947 as Engineering Society of Hong Kong with the aim of bringing together engineers of different disciplines for their common good. In 1975, the HKIE was incorporated by the Government under Ordinance, and continues to develop and expand. The Institution now has around 32,000 members of which over 14,000 are in the grade of corporate membership.

The Institution sets standards for the training and admission of engineers. As a Learned Society, the HKIE encourages the exchange of technical information and ideas among members and the industry.

The Information Technology Division (ITD) was established in 1990 and is one of the largest divisions amongst the 19 divisions in the HKIE. The Division has representatives sitting in the advisory committees of the HKSAR Government and tertiary institutions, providing advice from a professional's point of view. The Division has over 3,000 members with about 2,000 professional engineers.

於1947年成立的“香港工程協會”為“香港工程師學會”的前身，協會成立目標為結合不同界別的工程師，以裨益業界。隨著協會不斷發展，政府於1975年通過條例，正式賦予“香港工程師學會”現時的法定地位。學會現時有超過32,000名會員，當中超過14,000名為法定會員。

學會負責擬定專業工程師訓練和資歷審核的標準，對會員的操守亦有嚴格的要求。作為一個學術組織，學會積極鼓勵會員與其他及相關專業或學術團體交流。

資訊科技分部於1990年成立，並為學會十九個分部其中一個最大的分部。分部更有代表在政府及專上學院的諮詢委員會提供專業的意見。分部現有3,000名會員，而其中約2,000名為法定會員。

## Enquiry

### 查詢

Tel 電話 : (852) 2895 4446

Fax 傳真 : (852) 2577 7791

Email 電郵 : [hkie-sec@hkie.org.hk](mailto:hkie-sec@hkie.org.hk)

Website 網址 : [www.hkie.org.hk](http://www.hkie.org.hk)



# Acknowledgement

## 鳴謝

### Organising Committee

#### 籌備委員會

Ir Dr NG Chak-man (Project Director)

Immediate Past Chairman, HKIE - ITD

Ir LAI Kwai-cheung (Treasurer)

Honorary Treasurer, HKIE - ITD

Ms Dorcus TENG (Project Manager)

Senior Account Manager, AQ Communications Ltd.

Ms Vicky LAU (Project Secretary)

Account Executive, AQ Communications Ltd.

伍澤文博士工程師 (項目總監)

香港工程師學會資訊科技分部前任主席

勵貴祥工程師 (司庫)

香港工程師學會資訊科技分部名譽司庫

鄧天心小姐 (項目經理)

AQ Communications Ltd. 高級客戶經理

劉煒琪小姐 (項目秘書)

AQ Communications Ltd. 客戶主任

### Panel of Judges

#### 評審委員會

Ir Dr George SZE (Chief Judge)

Mr Andy BIEN

Ir Prof Horace IP

Mr Herman LAM

Ir Dr ONG Lay-lian

Ir Ted SUEN

Mr SUN Nan

Mr Mullar WAN

The Hon Nicholas YANG

Prof YUE OnChing

施禮華博士工程師 (主席)

卞家振先生

葉豪盛教授工程師

林向陽先生

王麗蓮博士工程師

孫耀達工程師

孫楠先生

尹偉堅先生

楊偉雄議員

余安正教授

### Assessment Team

#### 評審小組

Prof LEE Kin-hong (Chief Assessor)

Mr Thomas CHAN

Ir Dr Simon CHEUNG

Ir Tom CHUNG

Dr FU Tak-chung

Dr Walter FUNG

Mr Louis LEE

Mr Desmond LEUNG

Ir Dr Michael MAK

Mr Chester SOONG

Ir Monde WOO

李健康教授 (首席評審員)

陳永基先生

張景勝博士工程師

鍾一鳴工程師

傅德聰博士

馮瑞良博士

李隆賜先生

梁耀燦先生

麥偉明博士工程師

宋德嘉先生

胡鴻章工程師





## Acknowledgement 鳴謝

Award Sponsorship 大會贊助

Titanium Sponsor 鈦金贊助機構

**PCCW Solutions**®

Gold Sponsors 金贊助機構



香港賽馬會  
The Hong Kong  
Jockey Club

General Sponsors 贊助機構

Artemis 衍盛數碼  
DIGITAL LIMITED



Letv

LI & FUNG

oneAs1a  
亞洲脈絡

# Acknowledgement

## 鳴謝

### Ceremonial Sponsorship 晚宴贊助

#### Gold Sponsors 金贊助機構



#### General Sponsors 贊助機構







**HONG KONG ICT AWARDS**  
2015 香港資訊及通訊科技獎

Steered by Office of the Government Chief Information Officer,  
The Government of the Hong Kong Special Administrative Region  
香港特別行政區 政府資訊科技總監辦公室 策動

Organiser  
主辦機構



The Hong Kong Institution of Engineers –  
Information Technology Division  
香港工程師學會 — 資訊科技分部

Supporting  
Organisations  
支持機構



Disclaimer: This brochure was published by the Hong Kong Institution of Engineers - Information Technology Division. All information was provided by the winning companies. While every effort is made to ensure the accuracy of the above information, the Hong Kong Institution of Engineers - Information Technology Division cannot guarantee this to be so and will not be held liable for any reliance placed on the same.  
此刊物由香港工程師學會-資訊科技分部出版。得獎產品簡介均由得獎公司提供。上述資料已經力求準確，惟本會不能作出任何保證，亦不會對信賴此等資料的人士負上任何責任。