



### MOBILET-CARE BUBBLE



Single Person Transport Design [SPTD] Limited

天行動力科技有限公司





## Background



- The member company of Incu-Tech programme, HKSTP
- > maneuver in narrow spaces
- > enhance ease of Contro
- > stylish appearance







Single Person Transport Design
[SPTD] Limited



## 參賽作品簡介

- based on the award winning MoBiLET
- > the BUBBLE is an unique ICT innovative add-on

for the MoBiLET

- > also for all powered wheelchairs
- > responds to social problems





Single Person Transport Design
— [SPTD] Limited

Innovation and Creativity in C

## 資訊及通訊科技創新和創意

- > multi Ultra-sound **Sensor** Integration
- > dynamic programming technique
- > respond to real-time feedback
- > prevent confusion
- humanized situational awareness









Single Person Transport Design [SPTD] Limited

### Social Problems

社會美性題(

#### 馬鞍山輪椅客隨時炒車

f Recommend { 0







> incomplete accessible

facilities



馬鞍山區內無障礙通道多缺陷,坐輪椅的殘障人士稍一不慎,隨時翻車受傷。



社會其性題

#### 電動輪椅老翁墮坑傷

(明報) 2011年01月14日

**国 将作網站** 

【明報專訊】柴灣昨午發生罕見連人帶電動輪椅墮 坑事件, 一名乘坐電動輪椅老翁在進行路邊工程路 面轉彎時,疑因閃避途人失去平衡,連人帶輪椅跌 落工程的深坑內,幸僅受輕傷,經送院敷治後已經 出院。

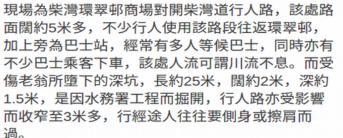
現場為柴灣環翠邨商場對開柴灣道行人路,該處路 面闊約5米多,不少行人使用該路段往返環翠邨, 加上旁為巴士站,經常有多人等候巴士,同時亦有 不少巴士乘客下車,該處人流可謂川流不息。而受 傷老翁所墮下的深坑,長約25米,闊約2米,深約 1.5米,是因水務署工程而掘開,行人路亦受影響 而收窄至3米多,行經途人往往要側身或擦肩而





wheelchair fall

down to Ruts





社會美性題

#### 電輪椅公園飛馳牙煙

東網Money18 即秒報價掌握大市走勢

電動輪椅公園飛馳,在遊人間高速穿梭,險釀意外!經常到天水圍公園晨運的李女士指出,曾多次目睹有電動輪椅高速行走,「架(電動)輪椅行得好快,仲要喺人群中間飛嚟飛去,真係好牙煙!」李更曾目擊有遊人險被電動輪椅撞倒而與電動輪椅使用者發生爭執。

> wheelchair

Speeding





### 社會其里題



放到一邊。 (左錦鴻

電動輪椅撞塌領匯玻璃門

電動輪椅撞塌領匯玻璃門

本文重點

【本報訊】領匯管理的秀茂坪商場發生罕 見「交通意外」,一名不良於行七旬翁, 昨午乘坐雷動輪椅推入商場時,突失控直 撞,將一道玻璃門撞甩,「玻璃雨」濺中 輪椅翁及替他開門的熱心女途人,老翁需 送院治理。 意外原因仍在調查。

> wheelchair

Crash into

obstacles



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#### 電動輪椅撞傷捷運站長 乘客到案聲稱不是故意的

















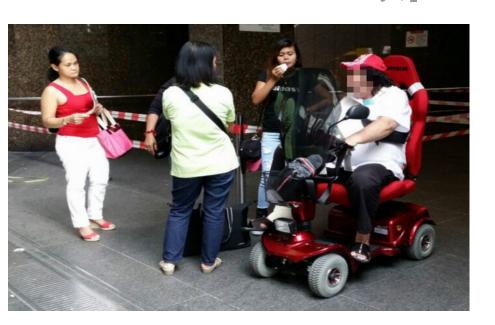
> wheelchair

Crash into pedestrian





社會其主題



### > conflict

between
wheelchair users
& pedistraint

















> Driving Assistant







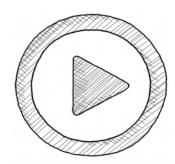






Functionality 功能 Single Person Transport Design [SPTD] Limited





Single Person Transport Design



## 市場潛力/表現



- > unique ICT auxiliary-control features
- > spin-off technology
- > 2.4 million powered wheelchair users in China
- > 3% vs **51%**

> global wheelchair user 15 millions by 2022







## Benefits and Impact

## 神益和影響

- > reduce social inequality
- > appearance removes "label of disabilities"
- > protects the users and its surroundings
- > powered wheelchair friendly environment
- "training free"







# QUality 品質



- > occupational therapist, HKMHDIA, NGOs
- > struck a balance between quality and cost
- > 304 stainless steel
- > CE Certified, IP-65 DC motors
- Panasonic (Sanyo) 18650 Lithium-ion cells
- driving duration = 35-40 kilometers
- battery pack life span 24-36 months
- > stable interaction between the mechanics



- MoBiLET- CARE BUBBLE is an unique ICT feature to **protect** powered wheelchair users and pedestrian.
- > BUBBLE is an add-on for all powered wheelchair
- > make Hong Kong be a wheelchair-friendly city
- > a comfortable riding experience



