

A full-page background image showing a man with a prosthetic right leg running on a rocky trail. He is wearing a blue and white athletic shirt and black shorts with red and white stripes. The background features a calm lake, distant mountains, and a clear blue sky. The scene is captured from a low angle, emphasizing the runner's motion.

數碼共融 — 人工智能與特殊教育的契機

微軟香港有限公司
企業及公益事務總監
吳家麗女士 (Ms Ada Ng)





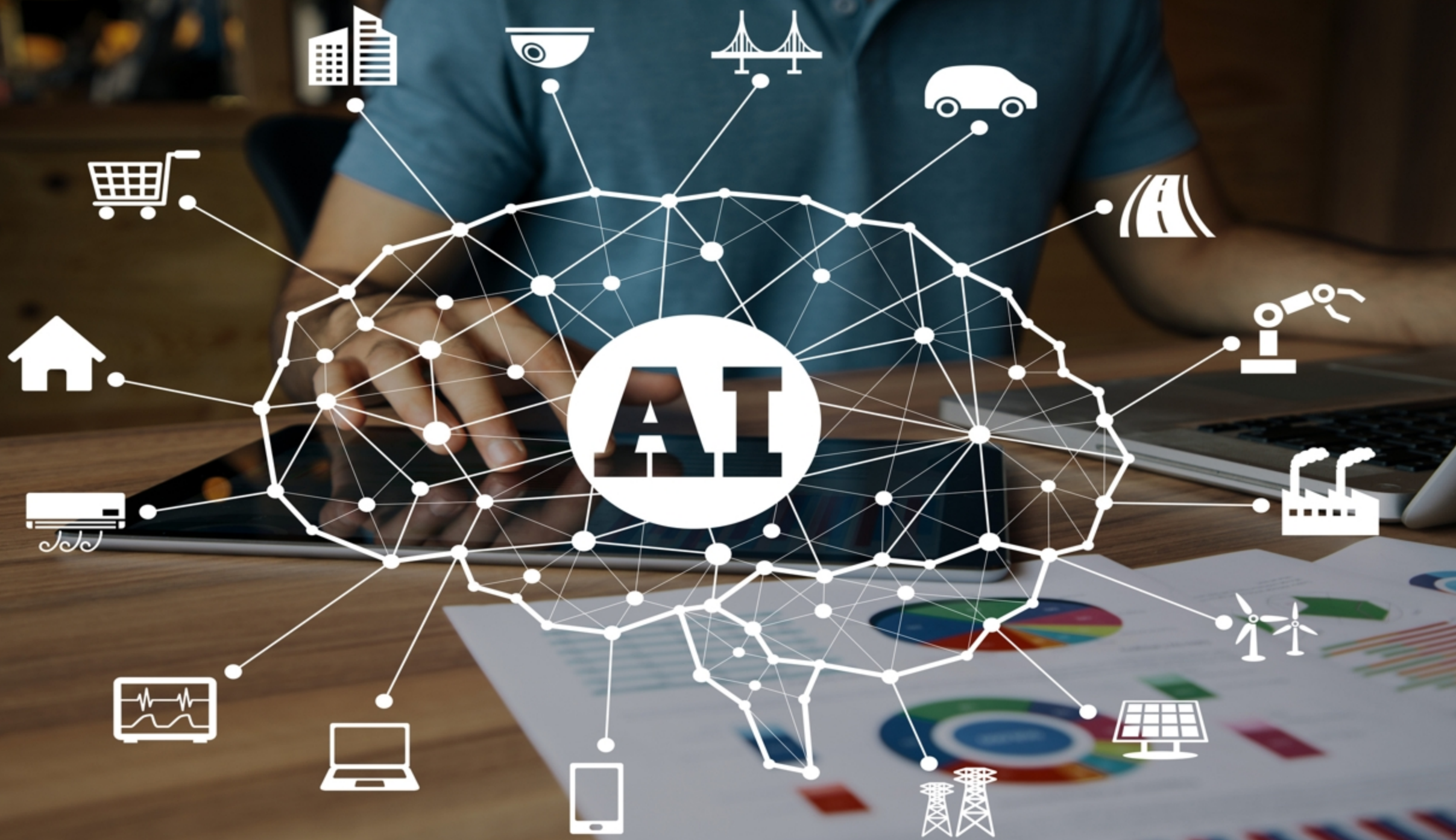
Microsoft's 使命

Empower every person and every organization on the planet to achieve more.

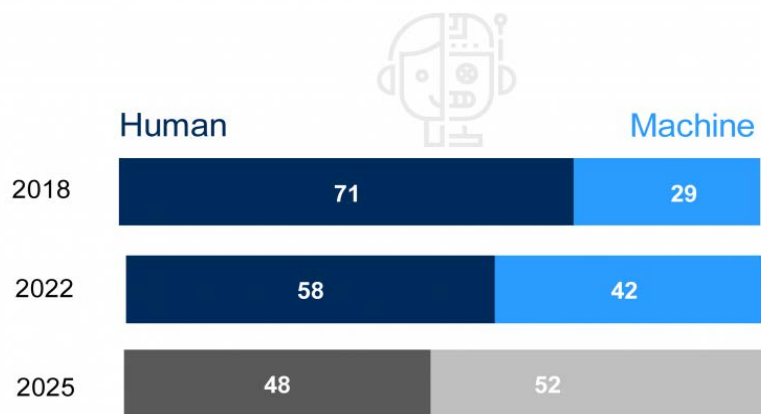
幫助在地球上每個人和每個組織成就更多。

成就力量始於共融





職場的數碼轉型



未來6年，有多少工作將被機械取代？

29% (2018) >>> 50%+ (2025)

2022年，**7千5百萬** 傳統職位將會消失，

但同時將出現 **1億3千萬** 新的工種。

133
Million

Top 10 Emerging

1. Data Analysts and Scientists
2. AI and Machine Learning Specialists
3. General and Operations Managers
4. Software and Applications Developers and Analysts
5. Sales and Marketing Professionals
6. Big Data Specialists
7. Digital Transformation Specialists
8. New Technology Specialists
9. Organisational Development Specialists
10. Information Technology Services

75
Million

Top 10 Declining

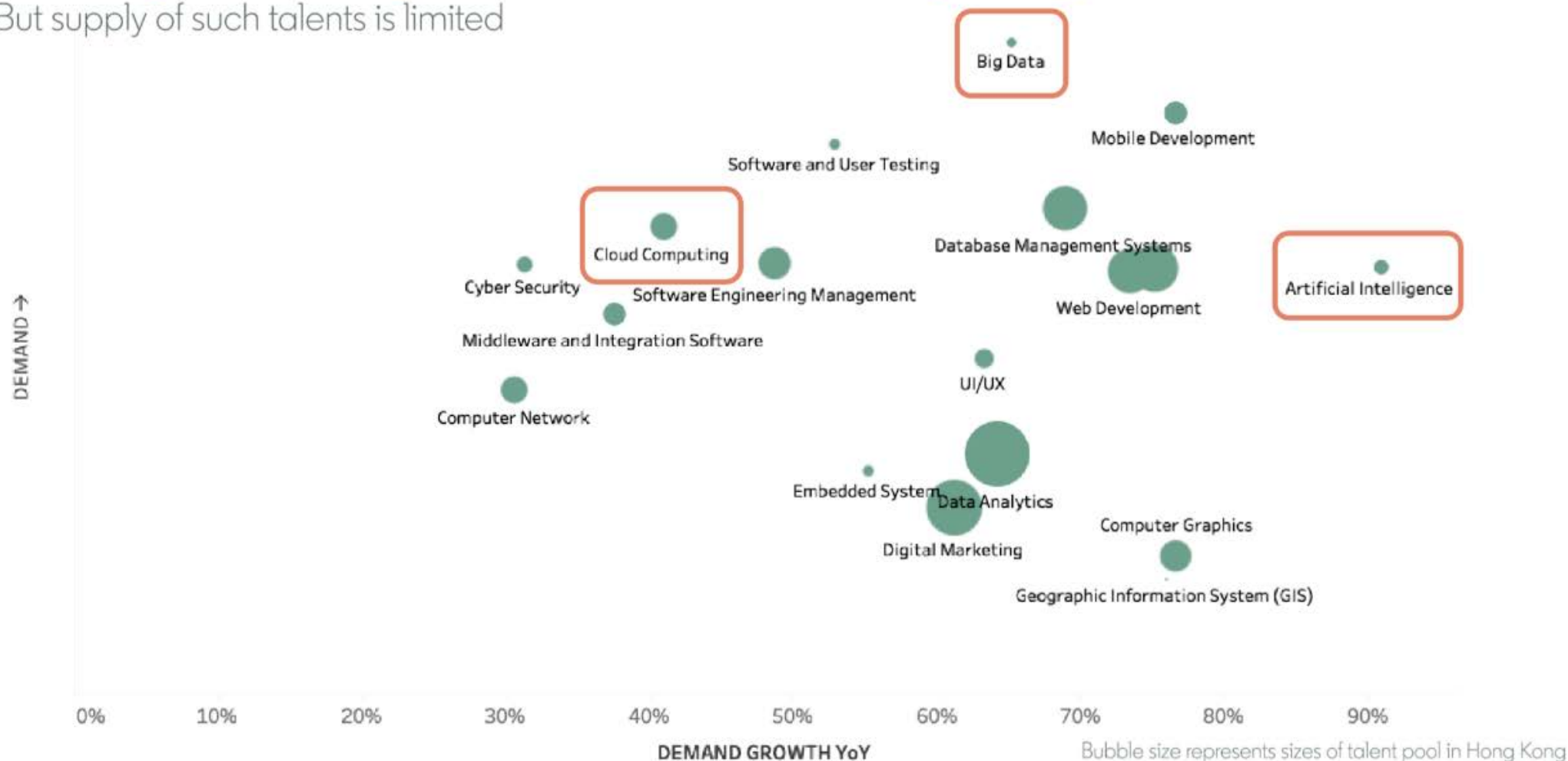
1. Data Entry Clerks
2. Accounting, Bookkeeping and Payroll Clerks
3. Administrative and Executive Secretaries
4. Assembly and Factory Workers
5. Client Information and Customer Service Workers
6. Business Services and Administration Managers
7. Accountants and Auditors
8. Material-Recording and Stock-Keeping Clerks
9. General and Operations Managers
10. Postal Service Clerks

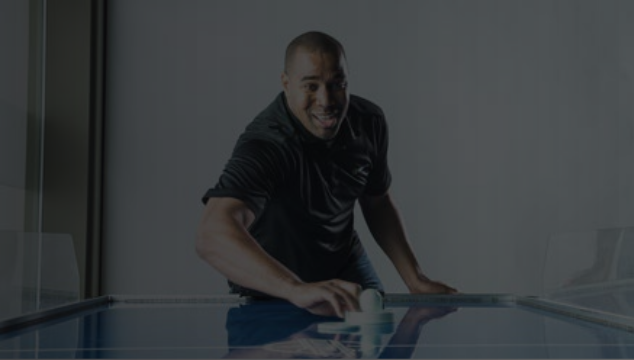
香港數碼技能人才短缺

Updated on March 2019

AI & Big Data are great in demand in Hong Kong

But supply of such talents is limited





這是挑戰

也是機會



Microsoft Philanthropies 計劃大綱

Digital Skills –

讓每個人Be #FutureReady，將來成就更多

#FutureReady



與各非牟利團體合作，
每年為有特殊
學習需要青少年提供
數碼技能培訓及
生涯規劃

Build Capacity

GirlSpark



每年招募逾30間中學
的女學生，透過為期
6個月的STEM培訓及挑
戰，啟發3,000+ 女生
對STEM的興趣

Generate Demand

Hour of Code



每年鼓勵15,000
K12學生參與1小時的
Minecraft 編程挑戰，
開拓同學們的
創新思維

Tech for Good –
讓所有機構實現更多

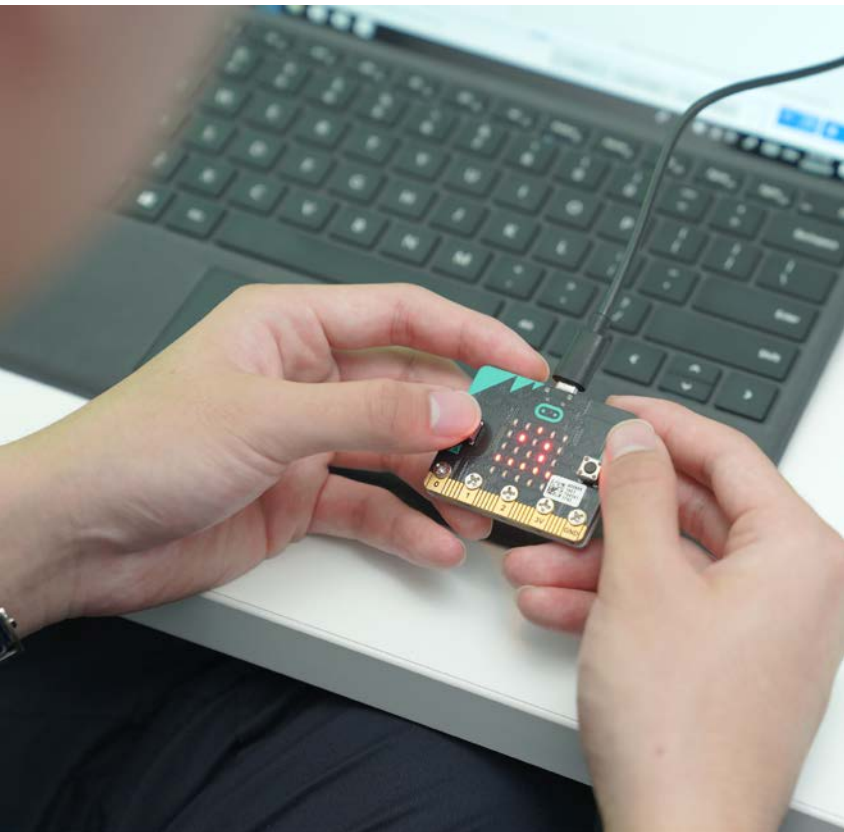
Tech for Good



透過講座、工作坊、
捐贈計劃等提升
非牟利團體同工的數
碼技能及推進
社福機構的前線服務

Build Societal Impact

#FutureReady 計劃



計劃目標:

- 了解現今的**職場數碼革命**，明白科技對弱勢青少年未來就業發展的重要性
- 認識數碼技能如何協助弱勢青少年**籌劃未來**
- 親身**體驗**最新數碼技能
- 掌握**Microsoft**各項免費教學資源，幫助延伸學習

目標人士:

- 非牟利團體導師 / SEN學校教師

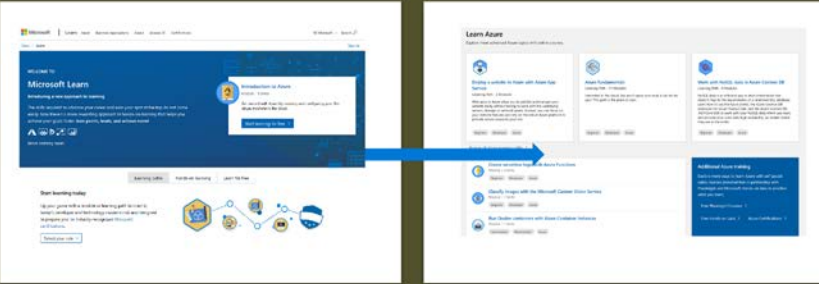
#FutureReady | Inspire (Train-the-Trainers)

目標: 每年推廣予 **150+** NGO Educators,
從而令 **600+** 受眾得以體驗數碼技能

報名!

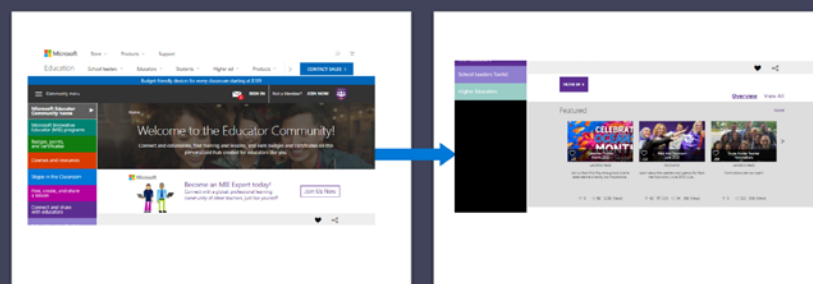


Microsoft 數碼技能教學資源



Microsoft Learn
<https://docs.microsoft.com/en-us/learn/>

MS Learn
MS免費技術課程，適合在職人士進修



Microsoft Educator Community
<https://education.microsoft.com/>

MS Educator Community
一站式MS教學工具使用範例和教程，適合K12老師



Real-world education
Microsoft Imagine Academy gives teachers technology skills and helps students succeed through employability and industry certification.

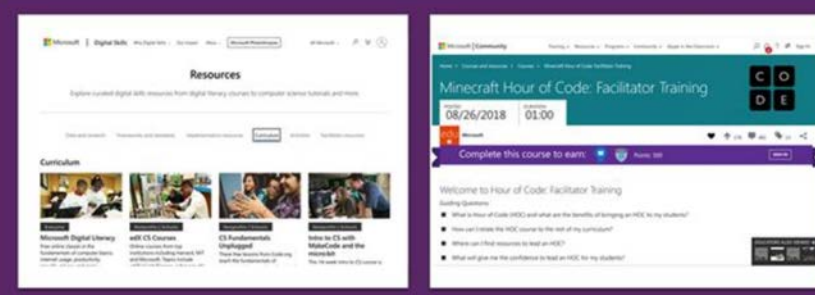
Curriculum
Access numerous online courses for students, educators and staff and prepares learners for Microsoft's globally recognized certifications.

Certifications
Students gain confidence in their technology skills and chart a path to college and career success.

Professional development
Provide educators with the latest technology curriculum, guidance, resources, and complementary certification exam vouchers.

Microsoft Imagine Academy
<https://www.microsoft.com/en-sg/education/imagine-academy>

Microsoft Imagine Academy
為老師及學生提供數碼技能教材及示範



Microsoft 數碼技能資源庫
<https://www.microsoft.com/en-us/digital-skills/resources/>

Microsoft Digital Skills Resources
免費數碼課程，適合青少年為未來做足準備



Microsoft 無障礙科技示範

微軟香港有限公司
公益事務經理
Ms Minna Mui



Microsoft Office 365 無障礙科技應用



PowerPoint
Presenter Coach



PowerPoint
Designer



OneNote
Immersive Reader



Microsoft
Dictate

PowerPoint Presenter Coach

通過在填充詞和語速等方面提供反饋改善了發布演講技巧，通過AI讓演示變得更出色

了解更多：

<https://support.office.com/en-us/article/rehearse-your-slide-show-with-presenter-coach-cd7fc941-5c3b-498c-a225-83ef3f64f07b>

Your Rehearsal Report (Preview)

Feedback

Rehearse Again

① Rehearse for more than one minute for Coach to better understand your speech and give recommendations.

Summary

Good job rehearsing! Keep up the hard work.

0:15
total time spent

1
slides rehearsed

Originality

✓ You avoided reading slide text aloud. That's good for keeping the audience engaged with your message.

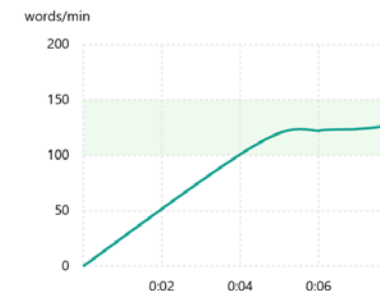
[Learn More](#)

Pace



Your pace is just right! Keep it up!

Your average pace over time



[Learn More](#)

Sensitive Phrases

✓ No sensitive phrases found. Great job using inclusive speech.

[Learn More](#)

Fillers

To sound more polished and confident, try to avoid using filler words. Pause or take a breath to relax. Some filler words to avoid are:

You know

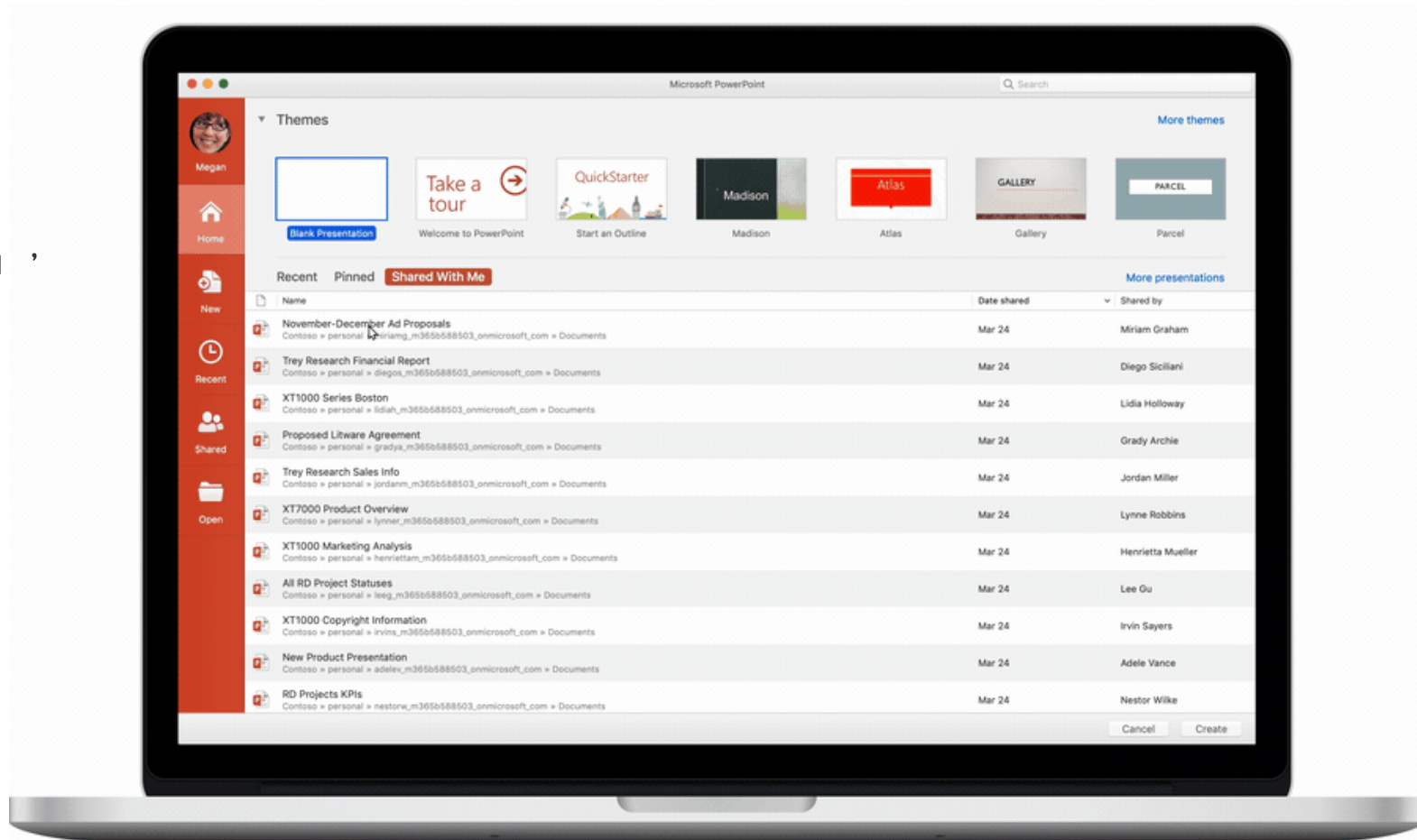
[Learn More](#)

PPT Designer

利用人工智能，協助使用者設計幻燈片，
大大提高工作效率

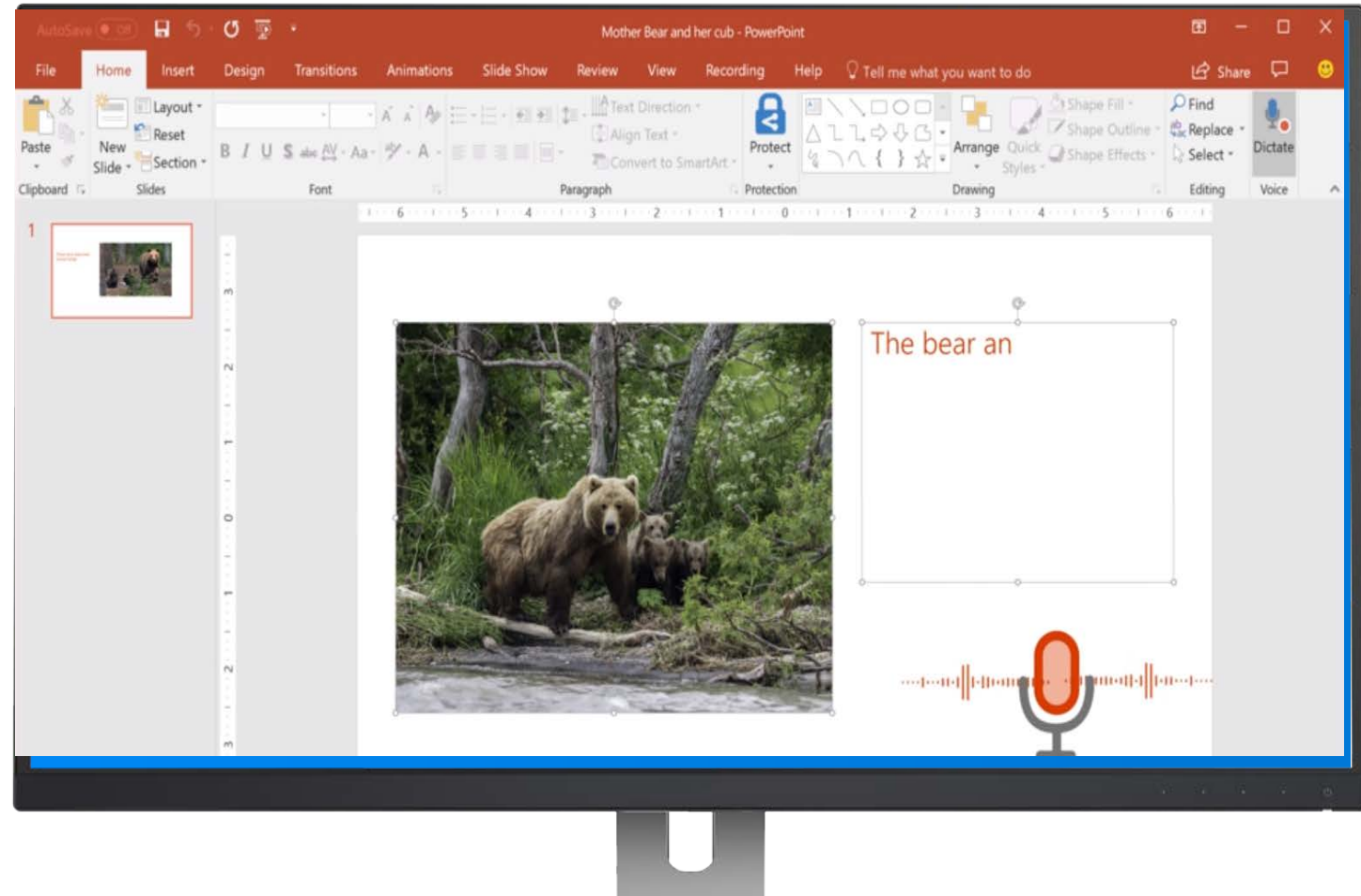
了解更多：

<https://support.office.com/en-us/article/create-professional-slide-layouts-with-powerpoint-designer-53c77d7b-dc40-45c2-b684-81415eac0617>



Microsoft Dictate

支援聲控語音輸入，
讓使用者可以利用語音輸入的方式打Word

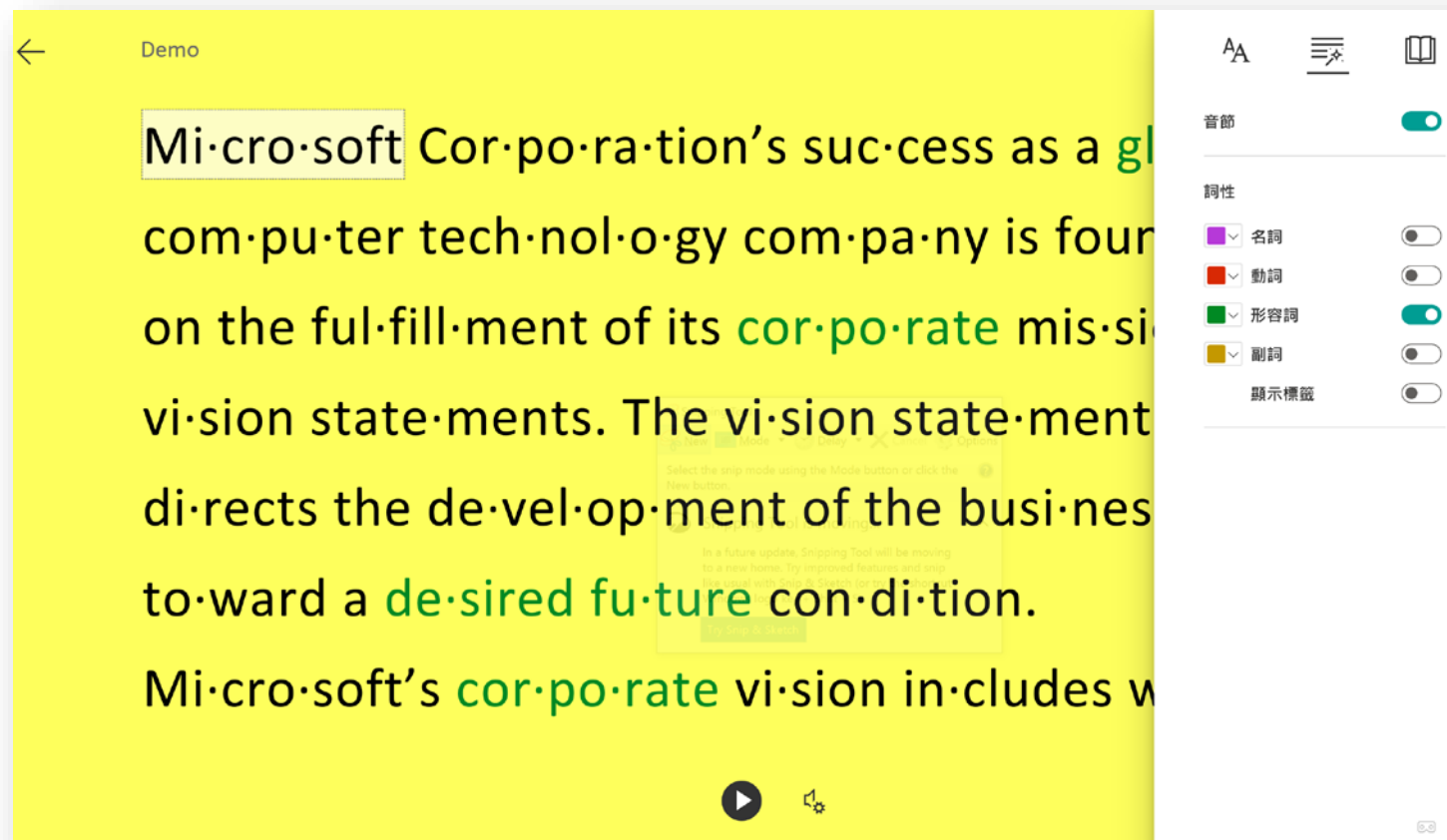


了解更多:

<https://support.microsoft.com/en-us/help/4042244/windows-10-use-dictation>

OneNote Immersive Reader (沉浸式閱讀程式)

學習工具的設計目的是支援閱讀障礙和 dysgraphia 的學生更有效地學習



了解更多:

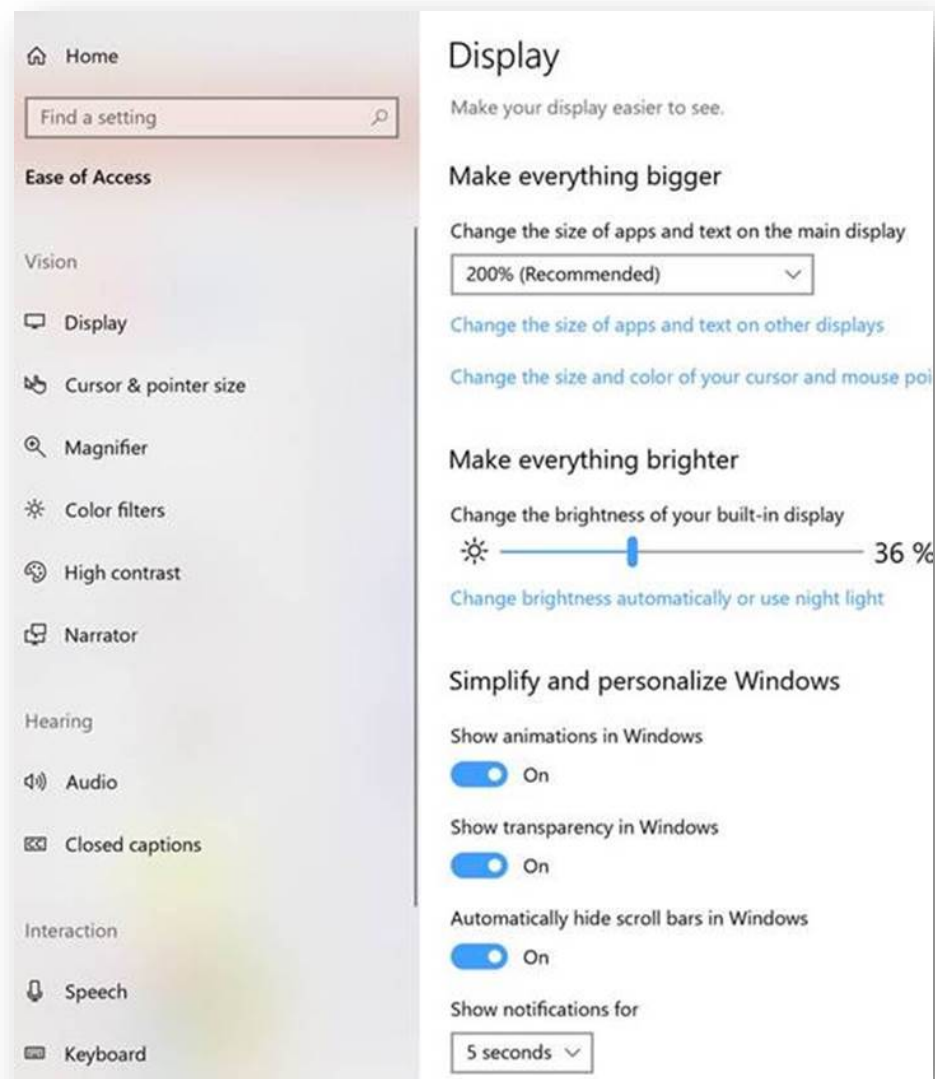
<https://support.office.com/en-us/article/create-professional-slide-layouts-with-powerpoint-designer-53c77d7b-dc40-45c2-b684-81415eac0617>

Windows 協作工具

使用者可按個人需要自定顯示器顏色、文字大小、放大鏡等不同設定，更可使用Windows朗讀程式幫助閱讀

了解更多:

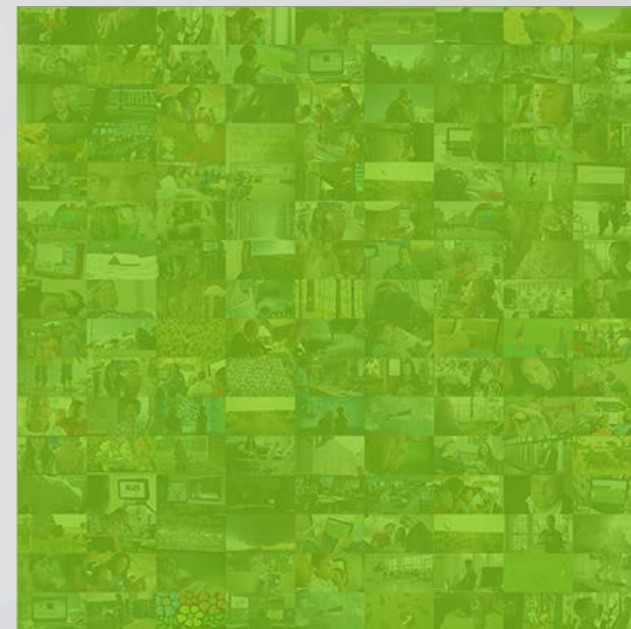
<https://support.microsoft.com/zh-hk/hub/4339839/windows-accessibility-help?os=windows-10>





SEN學校老師分享

Ms Pensy Lee
道慈佛社楊日霖紀念學校





玩・創
Minecraft @
YYL

12 - 12 - 2019



道慈佛社楊日霖 紀念學校

李佩茜 Pensy Lee



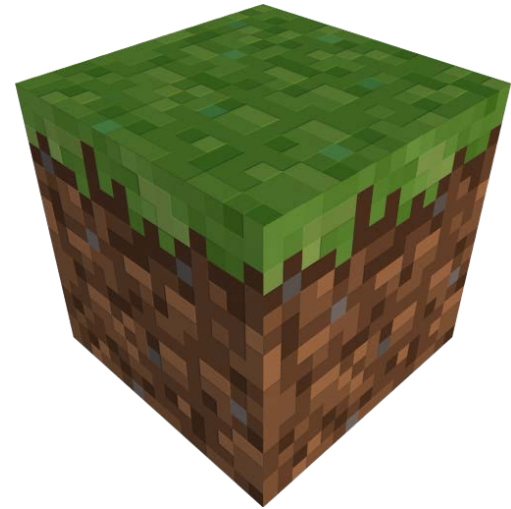
- 資訊科技統籌主任
- 任教
 - 數學
 - 電腦、資訊及通訊科技
 - 視覺藝術
 - 科學

背景。。

- 由2016年開始，嘗試讓學生以 Minecraft作品代替

目標：

- 1.運用適合的思維方法解決問題
2. 提昇自主學習的能力
- 3 增強自信及表達能力



以學生學習為中心

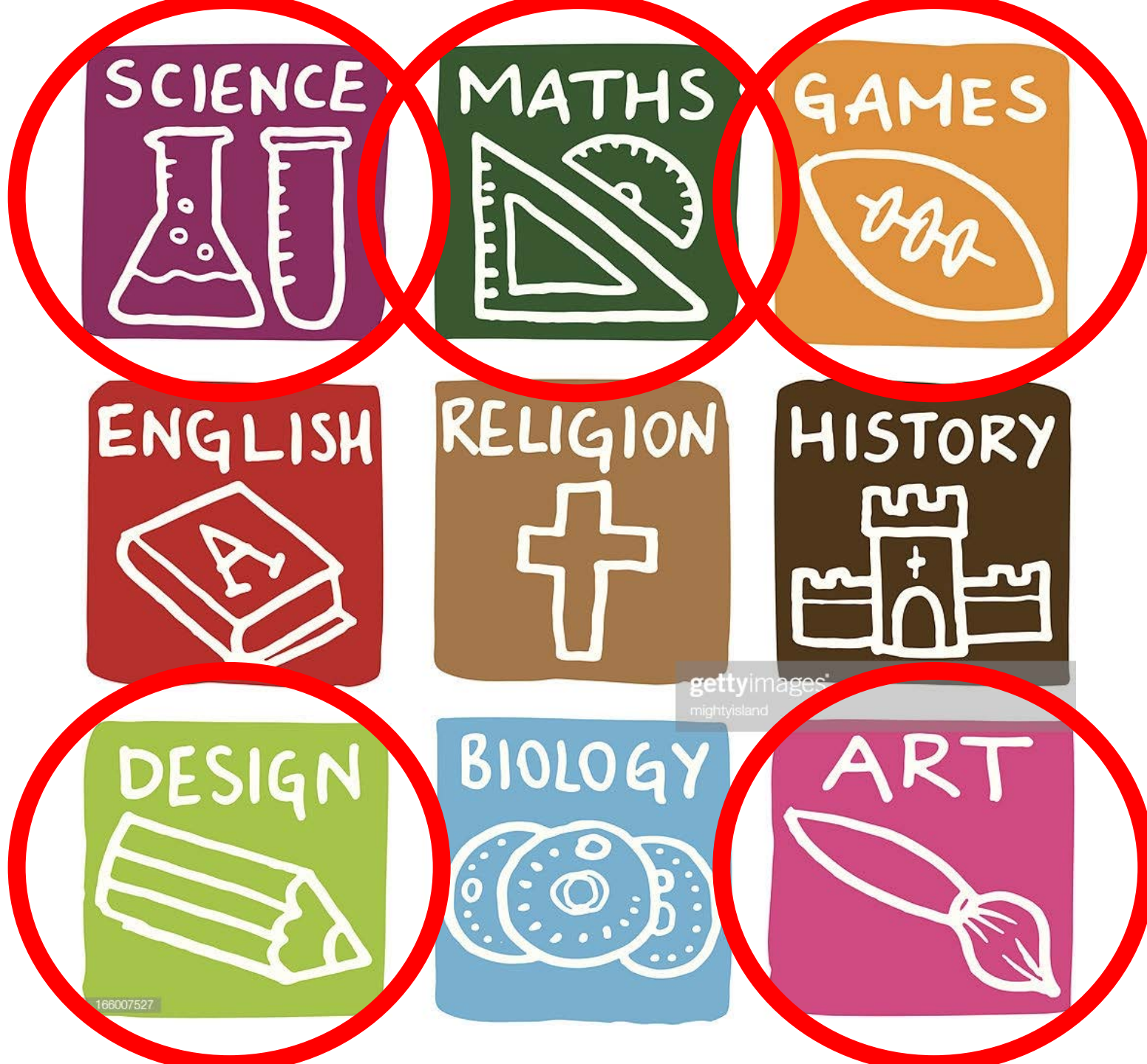
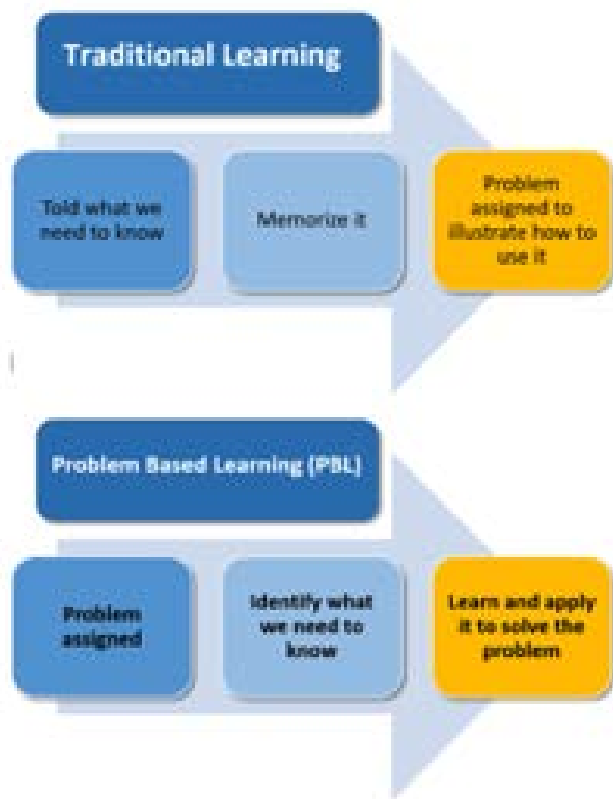
通過Minecraft Education這平台，學生能按自己興趣與能力，選擇一種或以上的先進技術 (例如：遊戲設計、擴增實境、虛擬實境...)進行探究，並以該技術繼續實踐，嘗試綜合運用於日常難題中。

遊戲中學習

通過遊戲，參賽者能提驗過程中的挑戰，而挑戰往往能促進學習，比賽及分享就更是實在的遊戲與挑戰。學生能寓遊戲中學習，維持學習動機，與此同時，學生能把成果在社交媒體中分享，得到更多支持與鼓勵。



科目



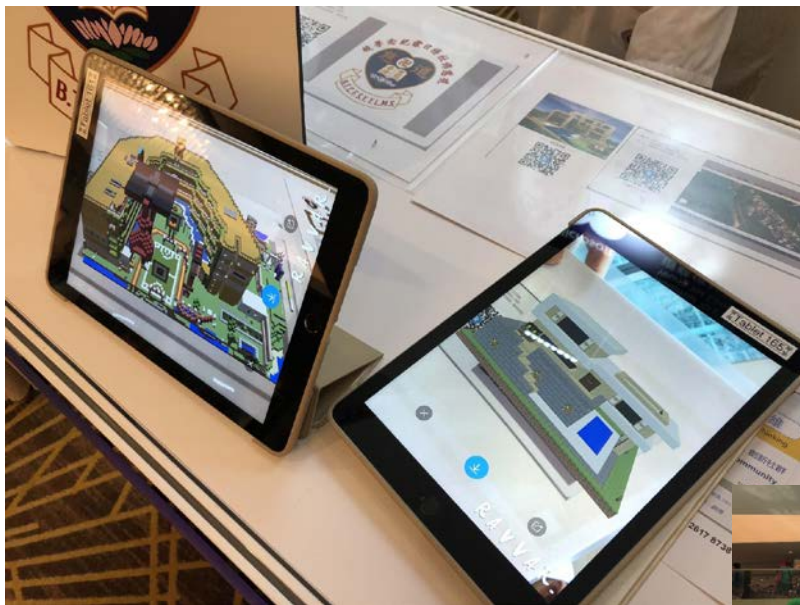
各科課題

科目	課題	例子	備註
視覺藝術	建築物面面觀	寫生/創作	延伸：3D Print及AR
科學	認識金屬	金屬展覽館	延伸：影片處理
德育	環保生活	不環保日常	延伸：VR
其他-Project/比賽		遊戲設計、AR/VR 展示、3DPrinting	

從 Minecraft 出發。。

2018 - 2019年度

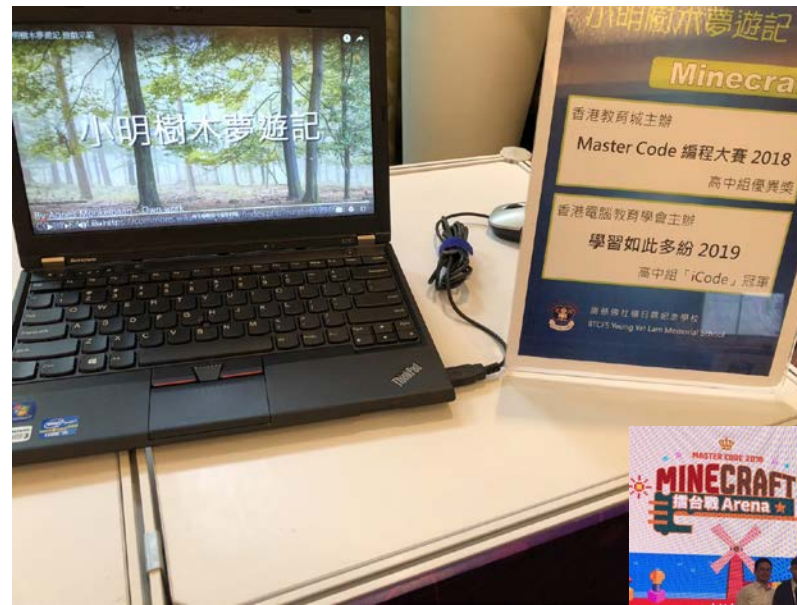
VR / AR



綠火焰計劃- 全港中小學VR遊戲設計比賽

高中組 - 優異獎

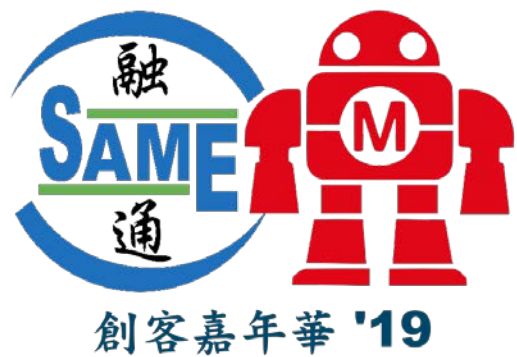
遊戲



Master Code編程大賽2018：小公民·大世界

初中組 - 優異獎

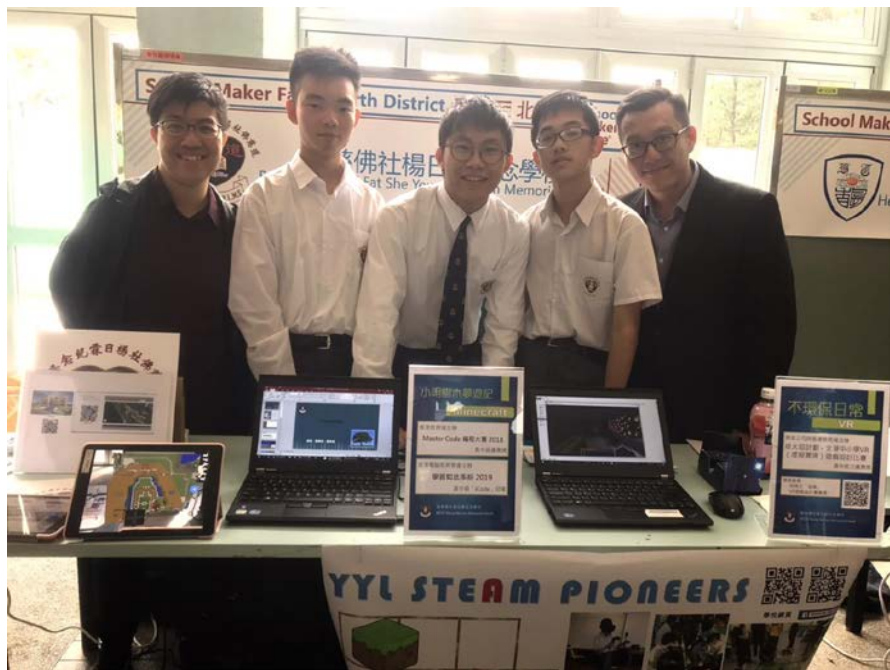
高中組 - 優異獎



融通創客嘉年華 2019



我們曾經在。。。分享



北區Maker Faire

16 MAR 2019

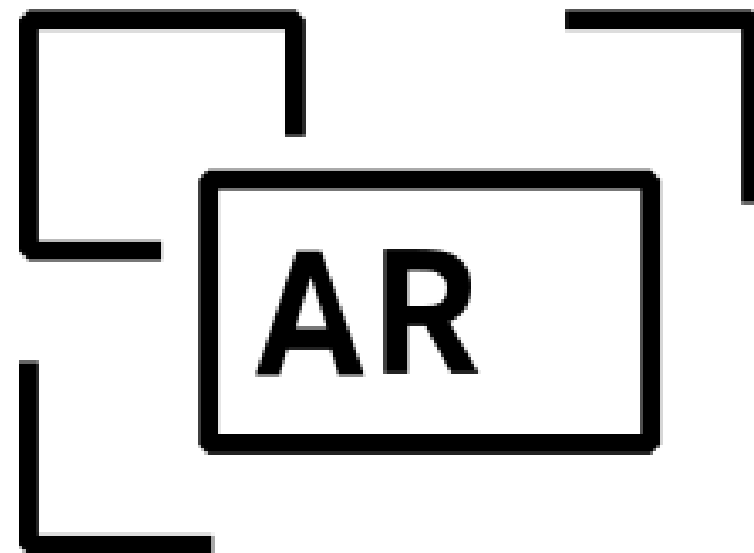


Microsoft 教育論壇 2019

4 MAY 2019

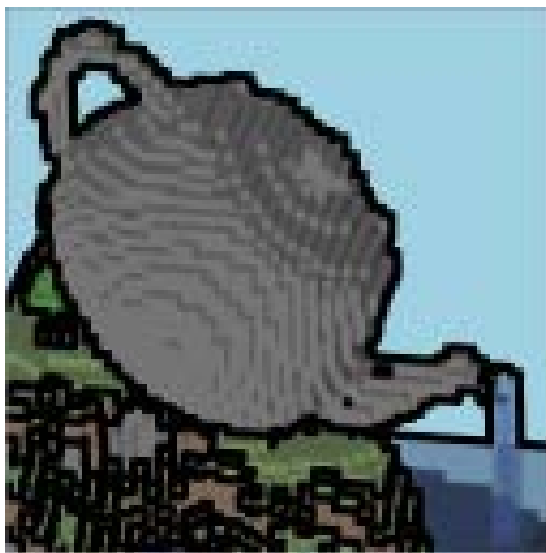
InnoSTEMer - My Hong Kong

12 - 12 - 2018

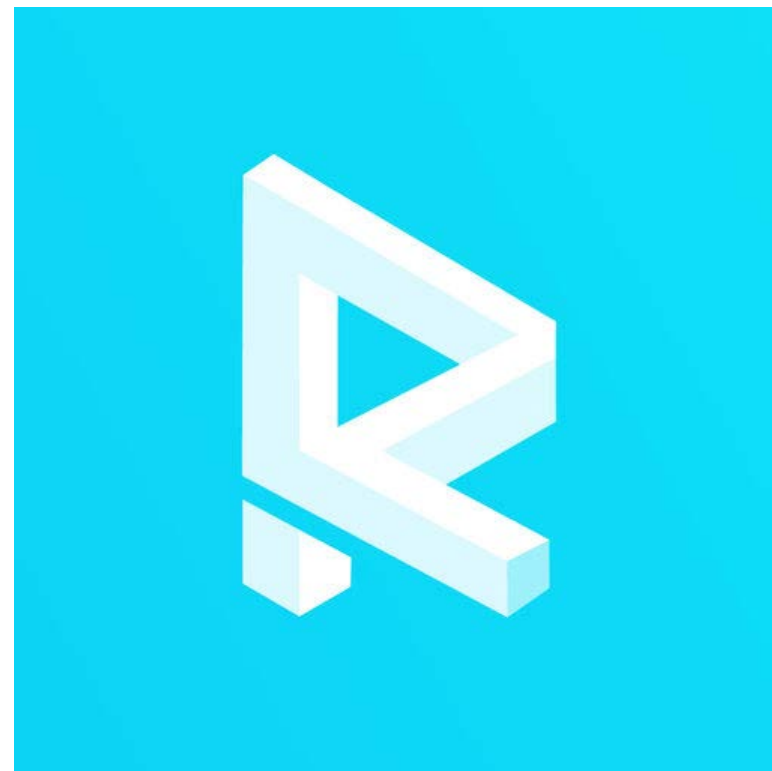




Minecraft

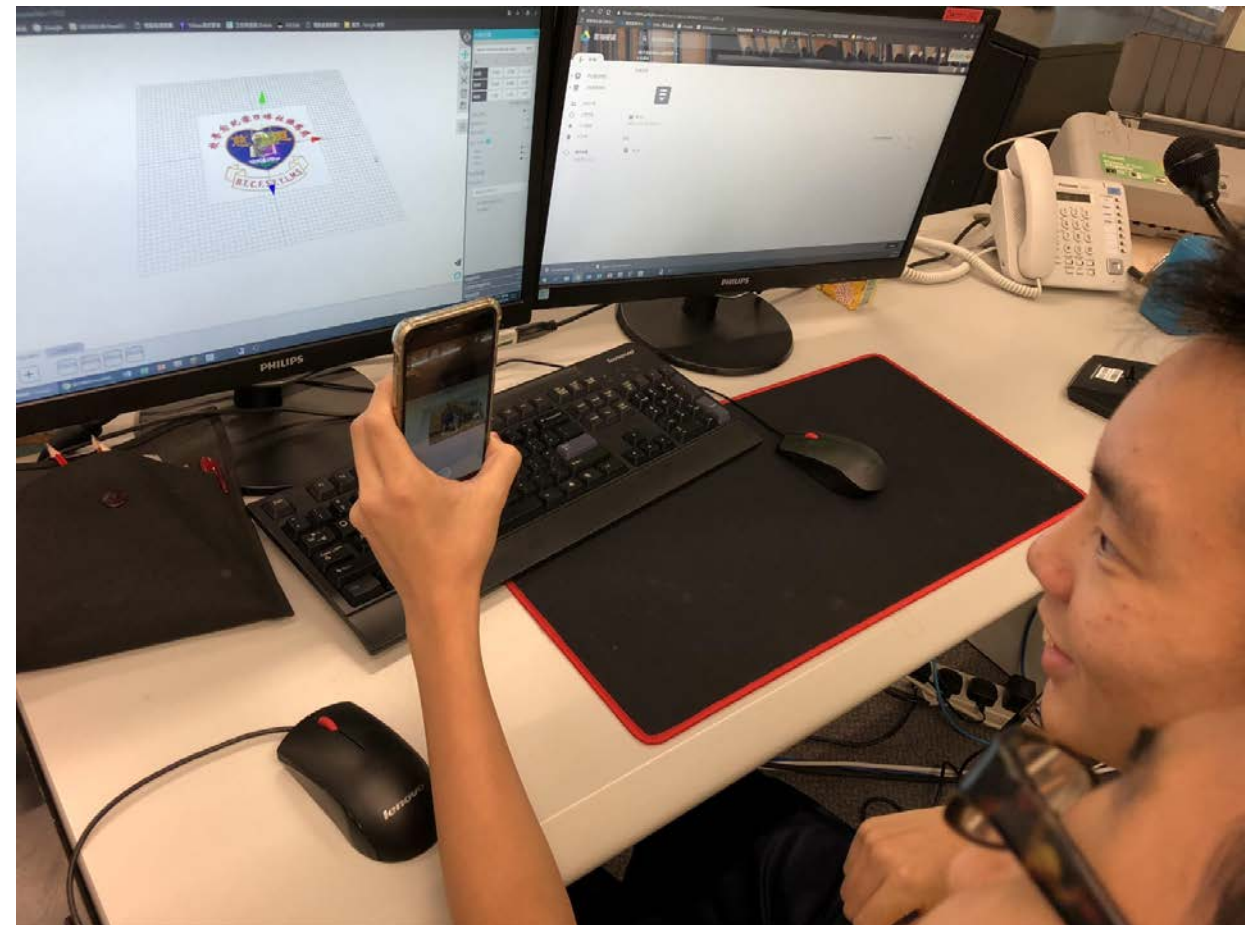
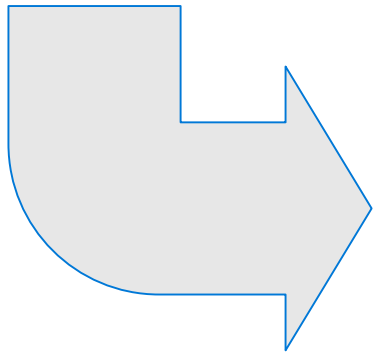
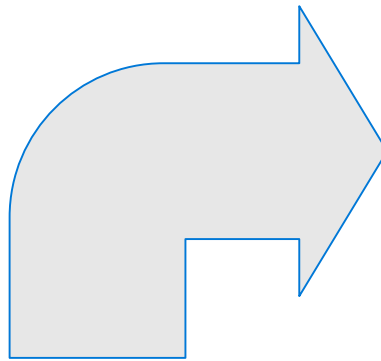


Mineways



RAVVAR

製作過程



第一步：使用APP的扫一扫功能，
扫描项目二维码进入项目；
第二步：将摄像头对准识别图，等待加载。



(请用 APP 扫描)





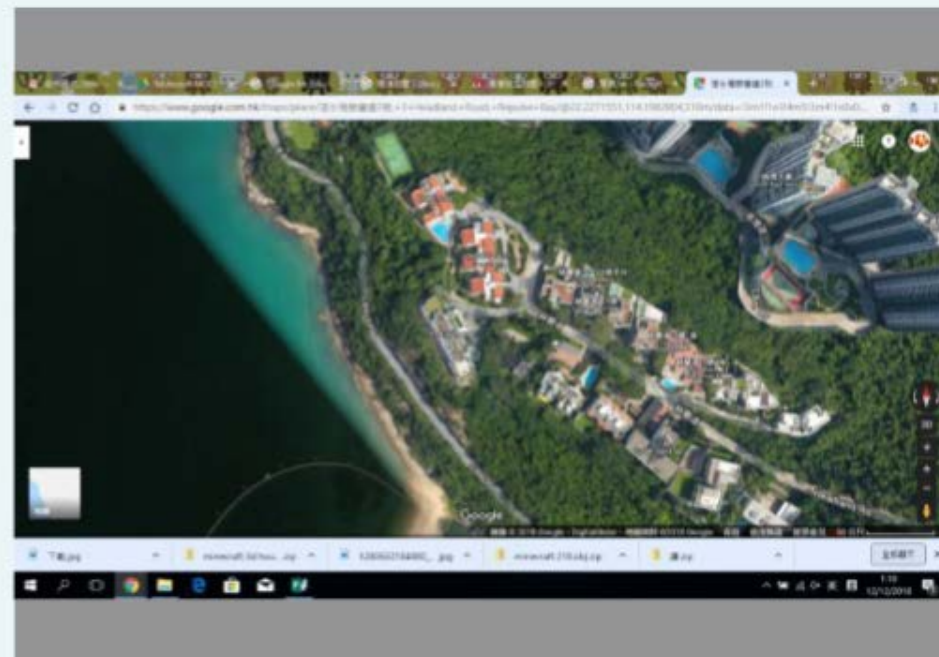
— HOUSE —



- 第一步：使用APP的扫一扫功能，
扫描项目二维码进入项目；
第二步：将摄像头对准识别图，等待加载。



(请用 APP 扫描)



RAVVAR.



智能貨櫃船



船隻設計描述



船身橫切圖



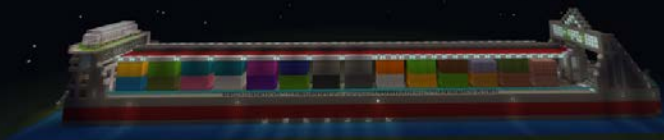
船尾各層設計

船隻創新描述

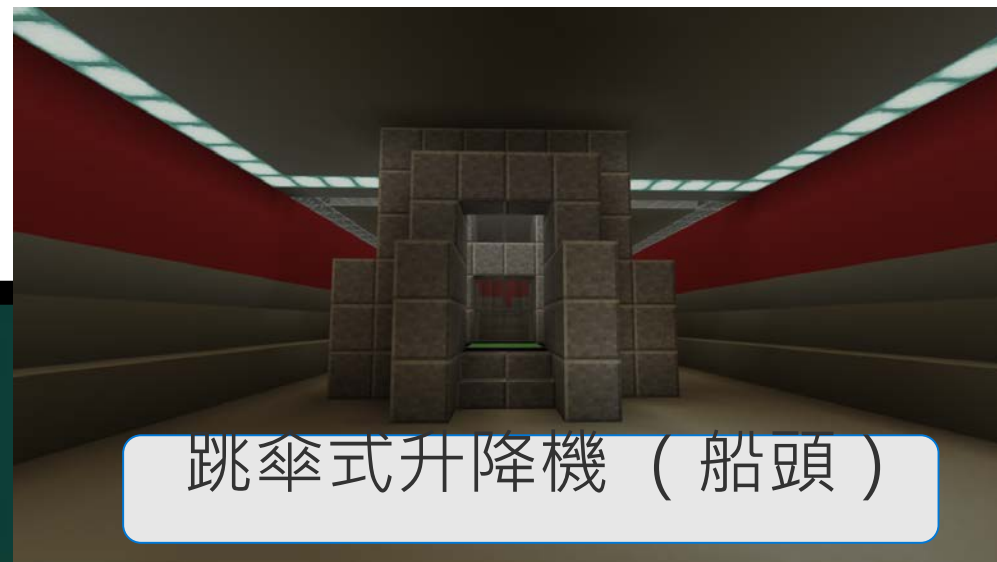
傳送裝置 - 方便船員



船邊燈



跳傘式升降機 (船頭)

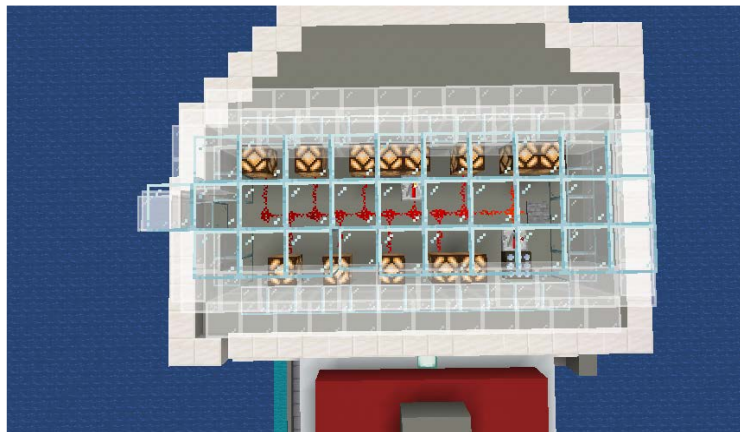


跳傘式升降機 (船尾)



船隻環保描述

引入自然資源，增添室內植物



太陽能
玻璃



綠色點綴



善用

船隻技術描述



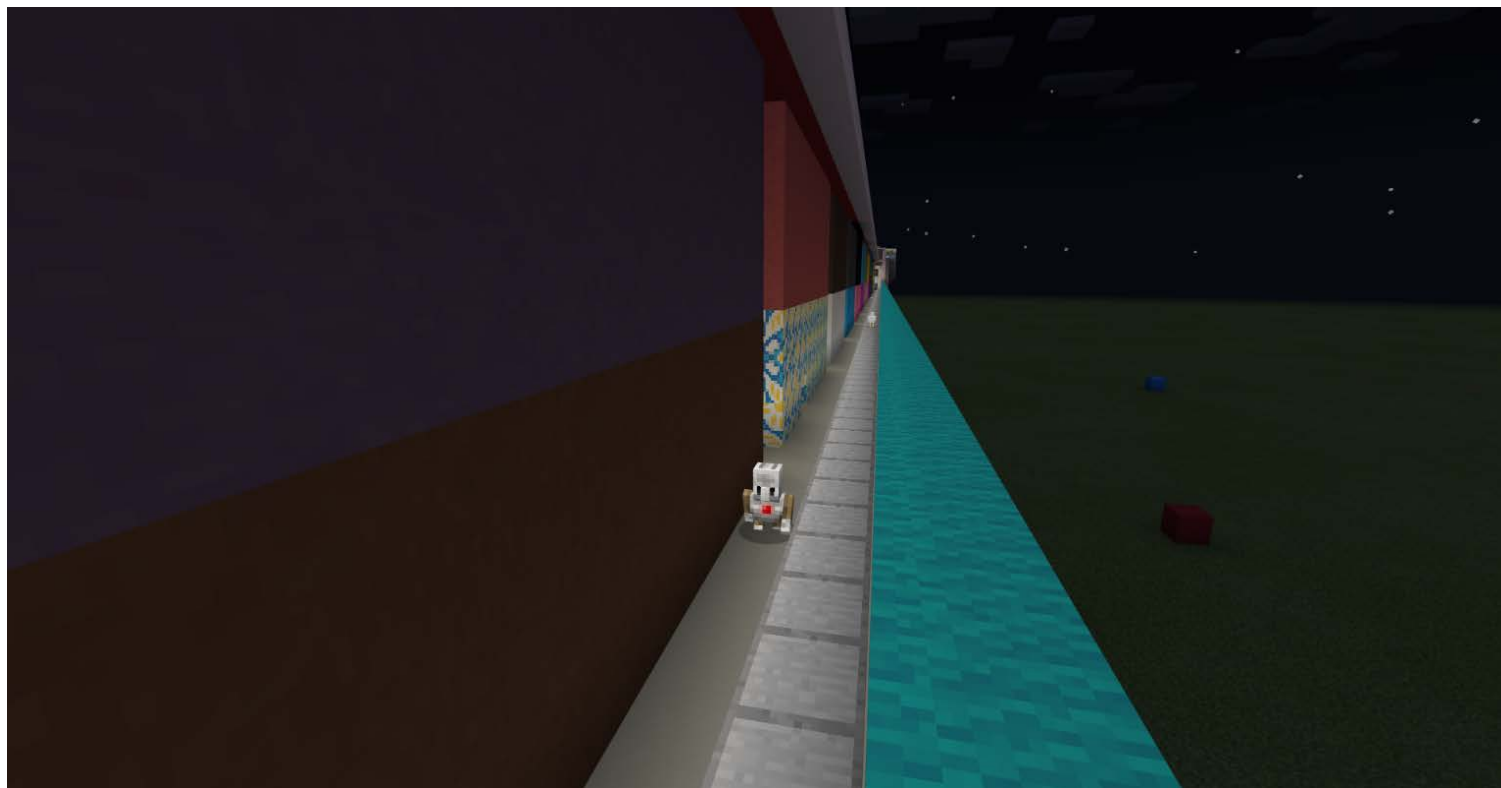
建設特別通道



密碼鎖

船隻技術描述

- 智能巡邏



智能程式設計



A Scratch script for a password lock mechanism. It starts with a blue 'when chat received' block containing the text 'b87'. This is followed by a blue 'execute command' block with the text 'setblock -238 10 227 air'. Then, there is a green 'wait' block for 2000 milliseconds. Finally, there is another blue 'execute command' block with the text 'setblock -238 10 227 redstone_block'.

```
when chat received "b87"
  execute command "setblock -238 10 227 air"
  wait 2000 milliseconds
  execute command "setblock -238 10 227 redstone_block"
```

密碼鎖



A Scratch script for a patrol mechanism. It starts with a blue 'when chat received' block containing the text 'patrol'. This is followed by an orange 'teleport' block to coordinates -233, 9, 230, facing South. Then, there is a green 'wait' block for 100 milliseconds. This is followed by a green 'repeat' block set to 2 times. Inside the repeat loop, there are four orange blocks: 'move forward' by 166 units, 'turn right', 'move forward' by 12 units, and 'turn right'.

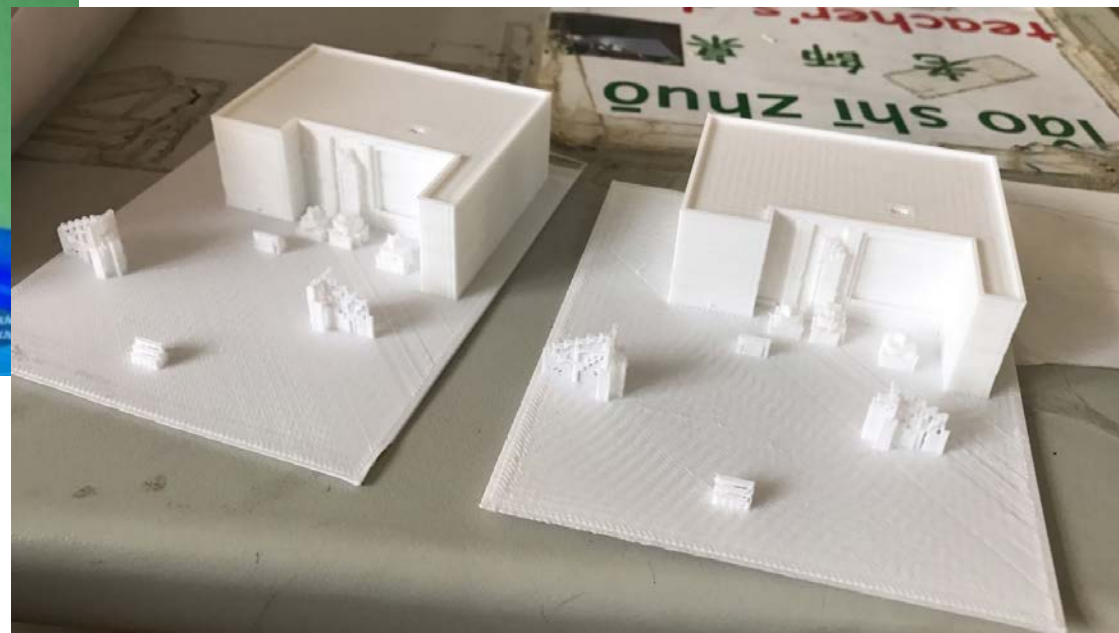
```
when chat received "patrol"
  teleport to world -233 9 230 facing South
  wait 100 milliseconds
  repeat 2 times
    move forward 166
    turn right
    move forward 12
    turn right
```

巡邏

昆明盤龍區培智學校



Minecraft + 3D 列印



放 慢 腳 步
親 手 去 做



YYL Minecrafters



Minecraft server 教學

<https://sites.google.com/site/sctas.edu.hk/minecraftserver/%E9%A6%96%E9%A0%81>

CONFIDENCE

從 Minecraft 出發 . . .



2016 - 2017

- Microsoft X 教城：創意共融編程大賽
初中組 - 季軍
- 2016全港中小學STEM創客[智庫盃]
中學組 - 優異獎
- 「學習如此多紛 2017」- 電子學習套件
製作比賽
初中組 (專題研習) - 季軍
- 「綠色空間 由我創造」綠色建築全港
學生比賽
初中組優異獎

2017 - 2018

- Master Code 編程大賽 2017 -
創建智慧城市
高中組 - 冠軍
- Master Code 編程大賽 2017 -
創建智慧城市
Minecraft擂台戰 (小學/特殊學校組) -
冠軍



從 Minecraft 出發 。 。 。



2018 - 2019

- Master Code 編程大賽 2018 -
創建智慧城市
高中組 - 優異獎
- Master Code 編程大賽 2018 -
創建智慧城市
初中組 - 優異獎
- Master Code 編程大賽 2018 -
創建智慧城市
Minecraft擂台戰 (中學組) -Archiver

- 「學習如此多紛 2018」- 電子學習套件
製作比賽
高中組 (iCode) - 冠軍
- 綠火焰VR遊戲設計比賽
高中組 - 優異獎



從 Minecraft 出發 . . .

2015 - 2019

- 學與教博覽:InnoSTEMer (2017及2018)
- Microsoft 教育論壇(2015 - 2019)
- 北區Maker Faire



Microsoft 香港教育論壇



2015



2016



2017



Learning & Teaching Expo 2017
學與教博覽 2017
Hong Kong Convention & Exhibition Centre | 13-15 Dec 2017



謝謝大家！

聯絡方法：

pslee@yyl.edu.hk

Whatsapp: 94200396