

資訊科技教育科技系列

建立校本人工智能課程三部曲：體驗、
理解、掌控



The AI Curriculum

1. 概述人工智能教育 (A.I. Education) 和運用人工智能於教育 (A.I. in Education) 中的基本概念；
2. 了解 A.I. in Education如何提升當前和未來的學與教效能；
3. 介紹使用一些A.I. in Education有關的資訊科技工具和硬件套件的功能；
4. 討論 A.I. in Education的未來發展方向。

Learning Phases

體驗人工智能科技
引起學習興趣
探索未知



Experience

學習A.I.知識與技能
建立基礎



Understand

掌控所學
發揮創意力
設計作品



Control

Learning Phases

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引起學習興趣
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發揮創意力
設計作品



Control

**How to
make good
use of the**

A.I. Lab



What can you experience in the A.I. Lab ?

- Smart IOT devices
- Different learning and teaching settings



What can
you do at
the A.I.
Lab?





**What can you
do at the A.I. Lab?**

Smart IOT devices



Smart IOT devices





The Teaching Aids

台灣：人工智慧互動平台 鴻海人工智慧導論

<https://ai.foxconn.com>



首頁

圖像辨識

自然語言處理

創作 AI

語音辨識

知識發現

聯絡我們

人工智慧 互動平台
鴻海人工智慧導論



AI in Education



人臉辨識進入台灣校園
學生隱私誰來把關？

[https://futurecity.cw.com.tw/
article/1082](https://futurecity.cw.com.tw/article/1082)

校園「靠臉點名」正風行
安全vs監控兩面刃

[https://tw.appledaily.com/new/
realtime/20191001/1639700/](https://tw.appledaily.com/new/realttime/20191001/1639700/)



AI in Education

AI Experiments by Google

<https://experiments.withgoogle.com/collection/ai>

The screenshot shows the 'AI Experiments' collection page. At the top, there is a navigation bar with 'Experiments with Google', 'Collections', 'Experiments', and a search icon. A 'SUBMIT EXPERIMENT' button is located on the right. The main content area features the title 'AI Experiments' and a descriptive paragraph: 'AI Experiments is a showcase for simple experiments that make it easier for anyone to start exploring machine learning, through pictures, drawings, language, music, and more.' Below the text is a video player showing a collage of AI-generated images and text, including a bicycle, a drink, and musical notation. At the bottom, there is a section titled 'AI + WRITING' with a partial description: 'Over the past 6 months, Google's Creative Lab in...'

Experiments with Google

Collections ▾ Experiments 🔍 Search

SUBMIT EXPERIMENT

COLLECTION

AI Experiments

AI Experiments is a showcase for simple experiments that make it easier for anyone to start exploring machine learning, through pictures, drawings, language, music, and more.

AI + WRITING

Over the past 6 months, Google's Creative Lab in

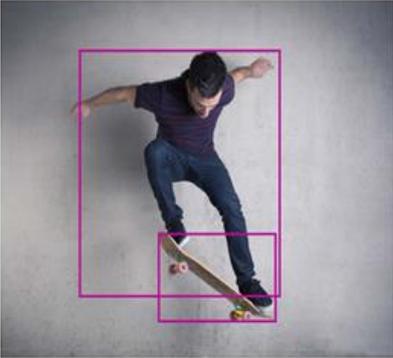
Computer Vision

Extract rich information from images to categorize and process visual data

Let's try:

<https://azure.microsoft.com/en-us/services/cognitive-services/computer-vision/>

See it in action



FEATURE NAME	VALUE
Objects	[{"rectangle": {"x": 238, "y": 299, "w": 177, "h": 117}, "object": "Skateboard", "confidence": 0.903}, {"rectangle": {"x": 118, "y": 63, "w": 305, "h": 321}, "object": "person", "confidence": 0.955}]
Tags	[{"name": "skating", "confidence": 0.999951541}, {"name": "snowboarding", "confidence": 0.990067363}, {"name": "sports equipment", "confidence": 0.9774853}, {"name": "person", "confidence": 0.9605776}, {"name": "roller skating", "confidence": 0.945730746}, {"name": "boardsport", "confidence": 0.9242261}, {"name": "man", "confidence": 0.9188208}, {"name": "outdoor", "confidence": 0.9107821}, {"name": "riding", "confidence": 0.900007248}, {"name": "skiing", "confidence": 0.894337356}, {"name": "footwear", "confidence": 0.8788208}, {"name": "sport", "confidence": 0.86974}, {"name": "skateboarder", "confidence": 0.86974}]

Image URL



機器學習體驗：限時塗鴉



<https://quickdraw.withgoogle.com/>



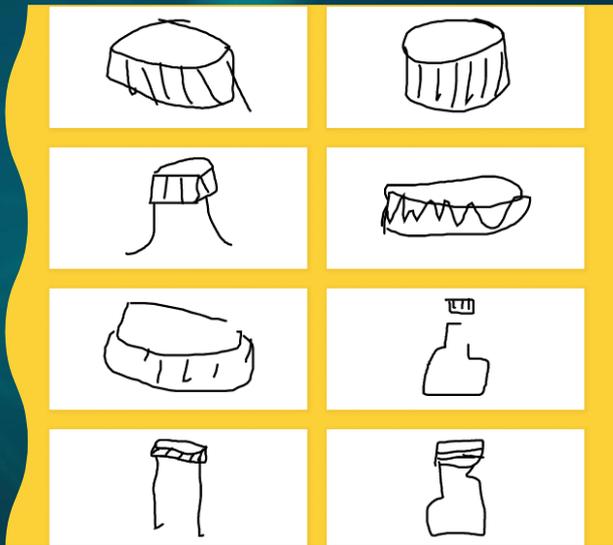
限時塗鴉!

類神經網路能學會辨識塗鴉嗎？

只要將你的繪圖加到[全世界最大的塗鴉資料集](#)，就能協助訓練這個類神經網路。這個資料集的內容會公開分享，為機器學習研究提供參考資料。

機器學習體驗：限時塗鴉

- 類神經網路是如何掌握瓶蓋的外觀模樣？
- 它會參考其他人畫的所有範例，並從中學習。



請畫出 瓶蓋

這是你的塗鴉，而類神經網路能辨識出你畫了什麼。

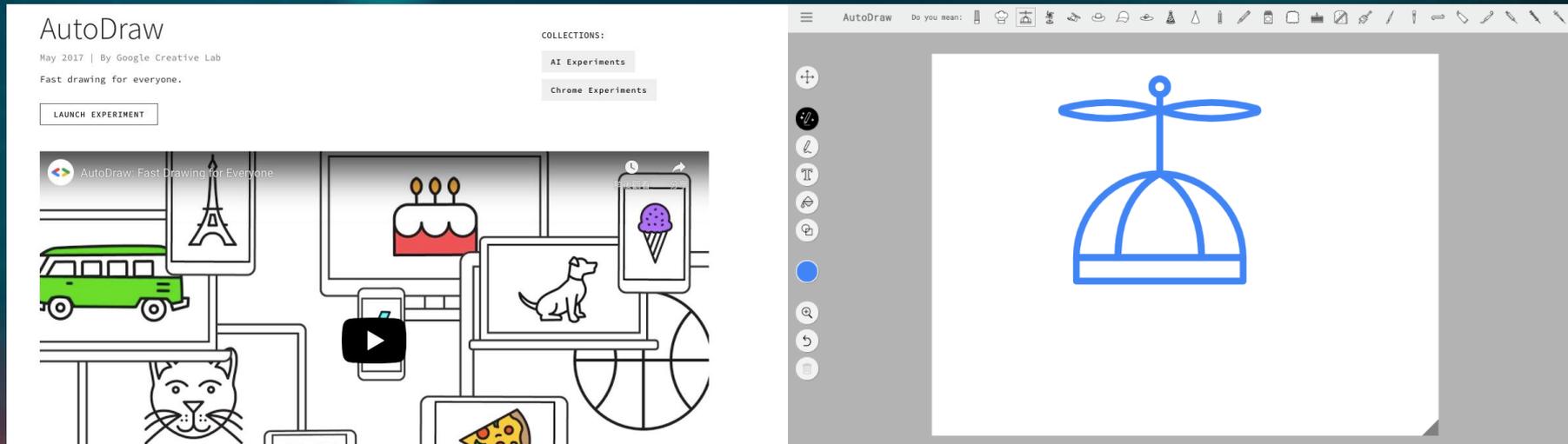
類神經網路認為你的塗鴉也像這些東西：

正確的比對結果 瓶蓋	第 2 接近的答案 鋸子	第 3 接近的答案 鋼琴

機器學習體驗：AutoDraw

手繪圖自動變靚靚

<https://www.autodraw.com/>



訓練模型 : Teachable Machine



[About](#)

[FAQ](#)

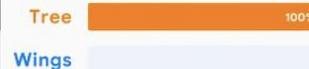
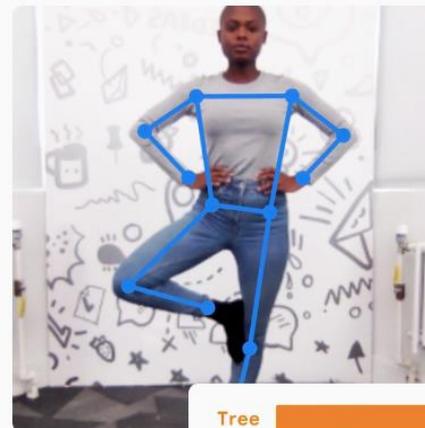
[Get Started](#)

Teachable Machine

Train a computer to recognize your own images, sounds, & poses.

A fast, easy way to create machine learning models for your sites, apps, and more – no expertise or coding required.

[Get Started](#)



訓練模型：Teachable Machine

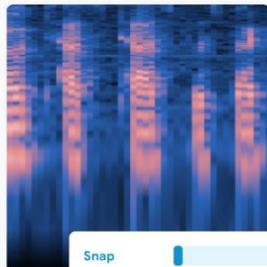
- Teachable Machine 是一個網頁版的簡單Machine Training 體驗網頁。
- 支援圖像、聲音及動作識別



Me + Dog <3
Just Me

Images

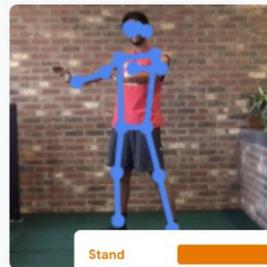
Teach a model to classify images using files or your webcam.



Snap
Clap

Sounds

Teach a model to classify audio by recording short sound samples. (WAV/MP3/etc file support coming soon.)



Stand
Squat

Poses

Teach a model to classify body positions using files or striking poses in your webcam.

- 現在試試用來作人像識別<https://teachablemachine.withgoogle.com/>

訓練模型 : Teachable Machine

分辨手寫文字紙幣 及 樣貌 辨析

The image displays the Teachable Machine web interface, which is used for training machine learning models. The interface is divided into several sections:

- Training Data:** Three classes of data are shown, each with a 'Webcam' and 'Upload' button. The first class, 'plant', has 87 image samples. The second class, '\$20', has 125 image samples. The third class, 'Me', has 45 image samples. A dashed box at the bottom left contains the text 'Add a class'.
- Training Status:** A 'Training' panel shows a 'Model Trained' button and an 'Advanced' dropdown menu.
- Preview:** A 'Preview' panel shows a live video feed from a webcam. Below the video, the 'Output' section displays the model's predictions for the current frame. The output is shown as a list of four items: 'plant' (orange bar), '\$20' (pink bar), 'Me' (purple bar), and an empty bar. The '\$20' and 'Me' items have a 99% confidence score.
- Output:** A separate 'Output' panel shows the model's predictions for a specific frame. The output is shown as a list of four items: '1' (orange bar), '2' (pink bar), '3' (purple bar), and '4' (blue bar). The '2' and '3' items have a 90% and 99% confidence score, respectively.

Learning Phases

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掌控所學
發揮創意力
設計作品



Control

概述人工智能教育 (A.I. Education)
和運用人工智能於教育 (A.I. in
Education) 中的基本概念

Alpha Go!?! (HK01新聞)



世界第一棋手
柯潔

解構原理

點解 AlphaGo
咁勁嘅?

人工智能 (A.I.)

人工智能或人工智慧 (Artificial Intelligence, 簡稱 AI) , 是指研究、開發用於模擬、延伸和擴展人類智慧的理論、方法、技術及應用系統的一門技術科學。

機器學習 (ML)

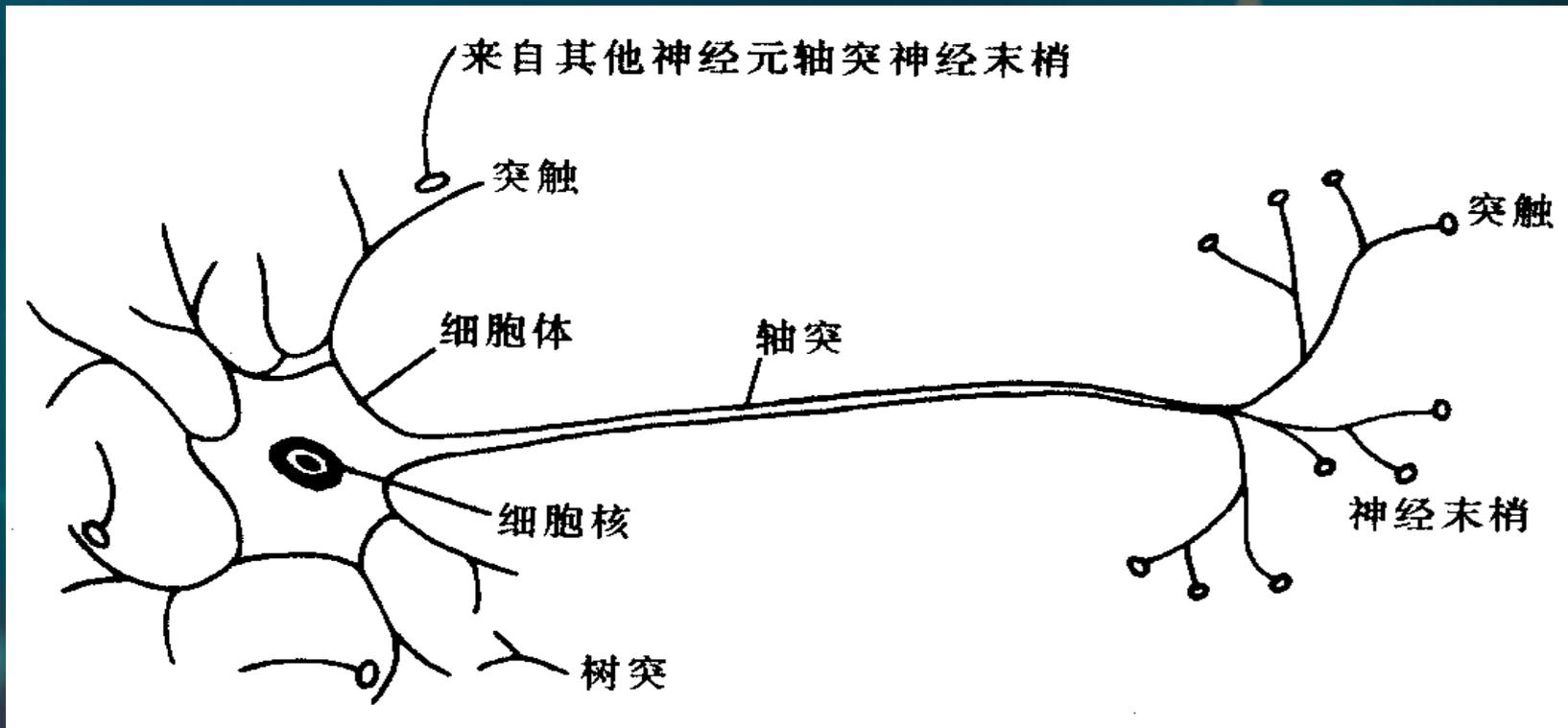
- 用於模式辨識和學習。機器學習的核心是演算法的集合，可根據記錄的資料學習和進行預測、優化不確定情況下的特定公用程式函數、從資料擷取隱藏的結構，以及將資料分類成精確的描述。如果明確的程式設計太過於死板或不實際，通常會使用機器學習。

深度學習 (Deep Learning)

- 是基於人工神經網絡的一種機械學習做法。
- 深度學習是一類機械學習演算法，特徵是用分做多層，每一層都負責由輸入處抽取比前一層高層次的特徵。

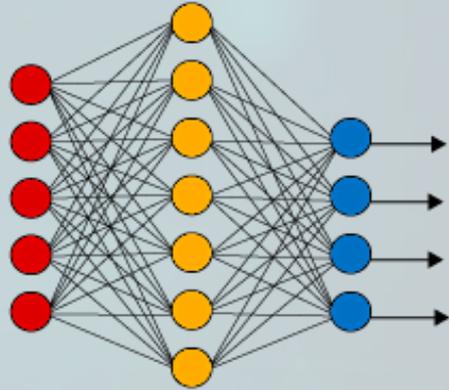


神經元 (Neuron)

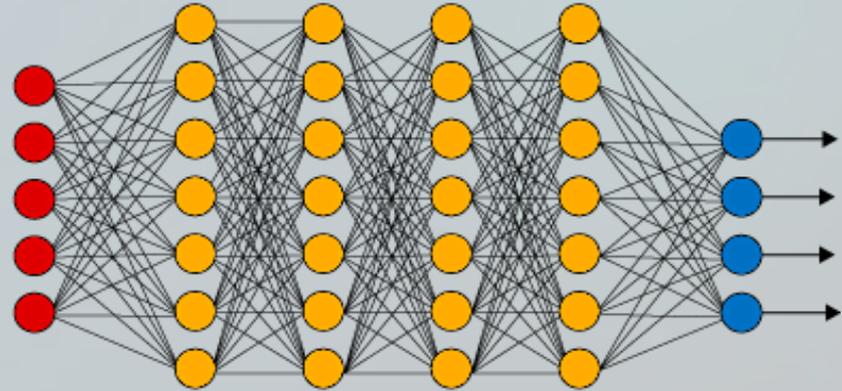


神經網絡 (NN)

Simple Neural Network



Deep Learning Neural Network



● Input Layer

● Hidden Layer

● Output Layer

使用人工智能的應用例子

- 圖像辨識
- 語音辨識
- 影像和影片分類、分段
- 自然語言理解
- 推薦引擎
- ...



商業應用的案例

❖ 異常偵測

- 識別與預期模式或資料集其他項目不一致的項目、事件或觀察。

❖ 詐騙偵測

- 建立預測模型，協助識別潛在的詐騙零售交易，或偵測詐騙或不適當的項目評論。

❖ 客戶流失率

- 找出流失風險最高的客戶，以便透過促銷或提供客戶服務積極與客戶接觸。

❖ 內容個人化

- 使用預測分析模型，根據客戶之前的行為來推薦項目或優化網站流量，以提供更加個人化的客戶體驗。

聊天機器人 (Chatbot)



什麼是聊天機器人 Chatbot?

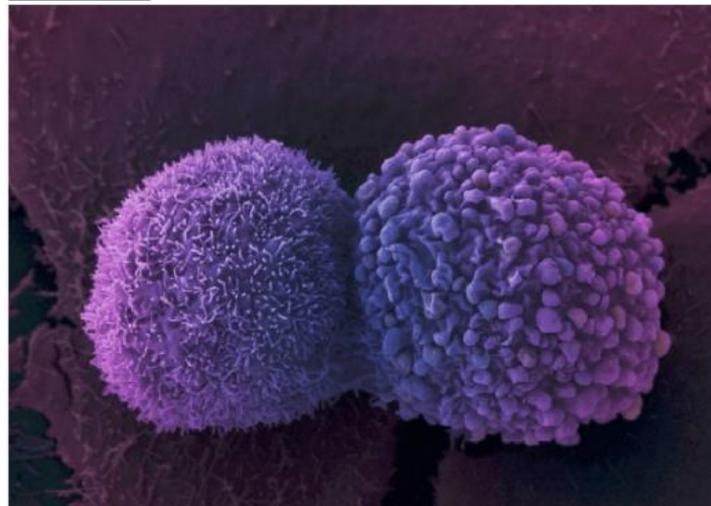
它是能自動幫你導入客流量好幫手!

Robots can learn how to cook by watching YouTube videos, thanks to DARPA



This Biotech Startup Hopes to Cure Cancer with Artificial Intelligence

by Shannon Dauphin Lee 11/10/2015 0 Comments



Maths Whizz – Virtual tutor

Makes students
advance in
mathematical
knowledge by 18
months

<https://www.whizz.com/>



The screenshot shows the Maths Whizz website homepage. At the top left is the Maths Whizz logo, which includes a small graphic of a stack of books and the text 'Maths-Whizz by whizz EDUCATION'. To the right of the logo is a navigation menu with links for 'Parents', 'Schools', 'Resources', 'About', and 'Contact'. Further right is a red button labeled 'SIGN UP >'. Below the navigation is a yellow banner for the 'Join the Whizz Summer Challenge', which runs from '26th July - 5th Sept' and offers 'win prizes'. A blue button on the banner says 'Join the CHALLENGE'. The main content area has a blue background with the headline 'The UK's leading virtual maths tutor'. Below this is a sub-headline: 'Discover how virtual tuition is transforming home learning for parents and schools.' A list of three bullet points follows: '- Engage children in maths, from reception to year 8', '- Increase confidence and deliver learning outcomes', and '- Designed for home, school and remote learning'. To the right of the text is an illustration of a laptop displaying a virtual math tutor character in a futuristic, icy environment. At the bottom, there is a section titled 'Find out more...' with two buttons: a green one for 'Parents >' and a blue one for 'Schools >'.

Maths-Whizz
by whizz EDUCATION

Parents Schools Resources About Contact SIGN UP >

Join the Whizz Summer Challenge
(26th July - 5th Sept) and win prizes

Join the CHALLENGE

The UK's leading virtual maths tutor

Discover how virtual tuition is transforming home learning for parents and schools.

- Engage children in maths, from reception to year 8
- Increase confidence and deliver learning outcomes
- Designed for home, school and remote learning

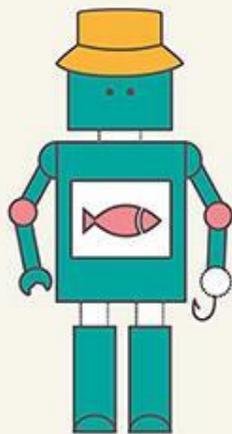
Find out more...

Parents > Schools >

Risk of being replaced:



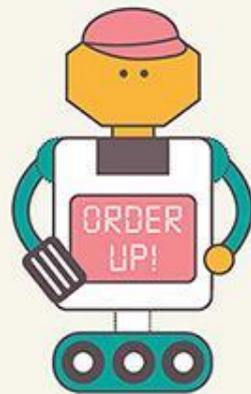
Taxi Drivers



Fishermen



Bakers



Fast Food Cooks

人工智能應用的限制

- 理解人類的語言的真正意義
- 在藝術和創作方面，人工智能仍處於起步階段
- AI駭客的攻擊？
- 人工智能是否明辨是非？

<https://willrobotstakemyjob.com/>

人工智能應用的優點及缺點

優點

- 機器可長時間工作
- 處理一些低技術而重複勞動的工作
- 創造新工種

缺點

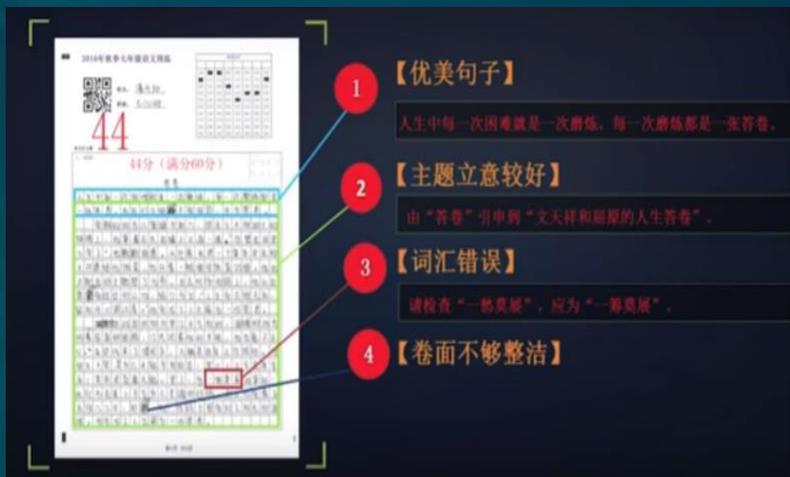
- 大規模失業危機
- 加劇貧富懸殊
- 機械失控危機
- 隱私權的保護
- 透明度和安全性

Box 1. Examples of new and emerging jobs

Occupation	Description	Examples of skills	Examples of knowledge	Example of attitudes and values
Robotics engineers	Research, design, develop or test robotic applications	Critical thinking, complex problem solving, quality-control analysis	Engineering and technology, robotics, design	Exploration, precision, observation
Biostatisticians	Develop and apply biostatistical theory and methods to the study of life sciences	Inductive reasoning, oral expression, mathematical reasoning	Mathematics, English language, education and training	Project/programme management, execution, inquisitiveness
Fuel-cell engineers	Design, evaluate, modify or construct fuel-cell components or systems for transportation, stationary or portable applications	Judgement and decision making, writing, critical thinking	Physics, mathematics, chemistry	Focus, reliability, feedback
Solar sales representatives and assessors	Contact new or existing customers to determine their solar equipment needs, suggest systems or equipment or estimate costs	Active listening, persuasion, social perceptiveness	Sales and marketing, engineering and technology, customer and personal service	Accountability, focus, results orientation
Video game designers	Design core features of video games; specify innovative game and role-play mechanics, story lines, and character biographies; create and maintain design documentation; guide and collaborate with production staff to produce games as designed	Programming, critical thinking, complex problem solving	Design, communications and media, psychology	Inquisitiveness, playfulness, passion

Source: O*NET (www.onetonline.org) in (Berger and Frey, 2015_[13])

AI in Education



2018年秋学期七年级数学期末测试卷

44 (满分60分)

- 1 【优美句子】
人生中每一次困难都是一次磨炼，每一次磨炼都是一次答卷。
- 2 【主题立意较好】
由“答卷”引申到“文天祥和屈原的人生答卷”。
- 3 【词汇错误】
请检查“一鼓莫展”，应为“一蹶莫展”。
- 4 【卷面不够整洁】



1-6 年级横式计算

小猿口算批改准确率超越人类

占每日批改题目数 180%

小猿口算

雪球 量子位

確實率99.9%！小猿口算靠AI批改數學題，
誤判率人工1/10，計算填空應用題批：

<https://xueqiu.com/1097649362/136041042>

Quillionz

Quillionz?

Product ▾ Developer Pricing About Us Blog Contact Us Login [Sign Up](#)

World's first AI-powered platform for creating questions, quizzes and notes

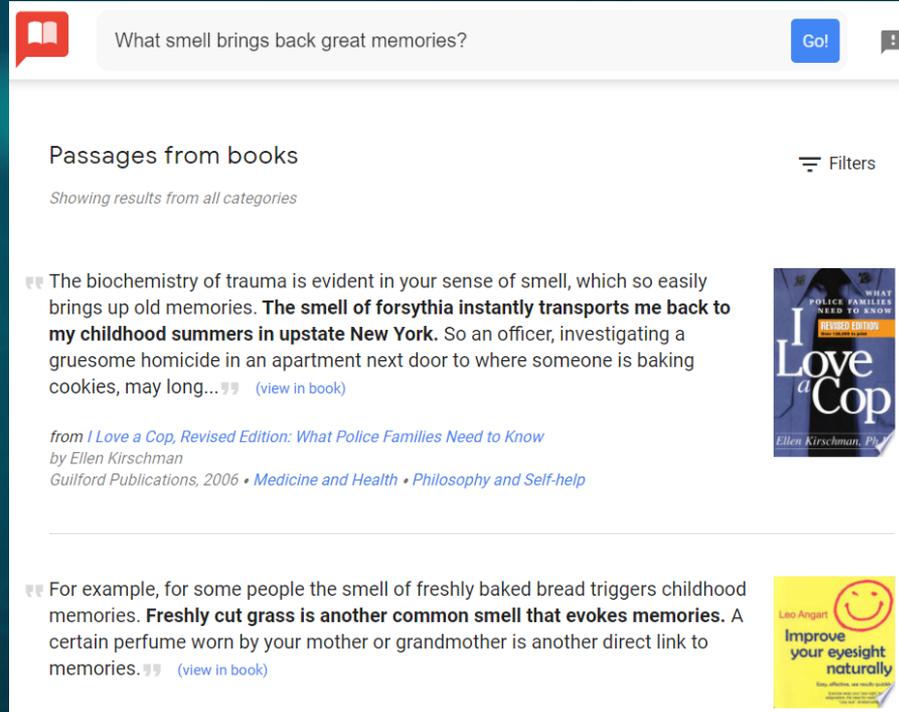
The screenshot displays the Quillionz interface. On the left, a document titled "United States" is being edited. A "Replace with" dropdown menu is open over the word "its", showing suggestions: "United States", "Culture", "McKinley Mt.", and "Dismiss". The document text includes: "America, the United States is bordered on the west by the Pacific Ocean and to the east by the Atlantic Ocean. Along the northern border is Canada and the southern border is Mexico. There are 50 states and the District of Columbia. To the north of the European Union, the United States has the longest coastline in the world and a vast central plain. The lowest point in the United States is Death Valley which is at -282 feet and the highest point is Mount McKinley at 20,320 feet. Throughout its history, the United States has been a nation of immigrants. The population is diverse with people from all over the world seeking refuge and a better way of life." Below the text, a "Content Readiness Meter" shows 96% and a message: "Great! Your content is now perfect for the Quillionz AI engine to process." An orange button labeled "Get Questions Ideas" is visible. On the right, a sidebar contains a progress indicator with five steps: 1. Submit Content, 2. Choose Keywords, 3. Review Content (highlighted), 4. Done, and 5. Help. The "Review Content" section shows a list of issues: 0 Lengthy sentences, 0 Subjective sentences, 0 Incomplete sentences, and 2 Pronoun replacements. At the bottom of the interface, there is a copyright notice: "© 2020 Harbinger AI Inc. All rights reserved." and social media icons for Facebook, Twitter, LinkedIn, and Pinterest.

Step 3 : Review Content - Get your content ready for Quillionz AI engine.

ENTER YOUR EMAIL ID

Google “Talk-to-Books”

<https://books.google.com/talktobooks/?suggestions=18>



The screenshot shows the Google Talk-to-Books interface. At the top, there is a search bar with the text "What smell brings back great memories?" and a blue "Go!" button. Below the search bar, the page is titled "Passages from books" and includes a "Filters" button. The results are displayed in a list format. The first result is a quote from the book "I Love a Cop" by Ellen Kirschman, discussing the biochemistry of trauma and its connection to smell. The second result is a quote about the smell of freshly baked bread and its connection to childhood memories. Each result includes a "view in book" link and a small image of the book cover.

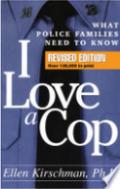
What smell brings back great memories? Go!

Passages from books Filters

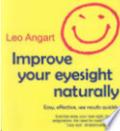
Showing results from all categories

☞☞ The biochemistry of trauma is evident in your sense of smell, which so easily brings up old memories. **The smell of forsythia instantly transports me back to my childhood summers in upstate New York.** So an officer, investigating a gruesome homicide in an apartment next door to where someone is baking cookies, may long...☞☞ [\(view in book\)](#)

from *I Love a Cop, Revised Edition: What Police Families Need to Know*
by Ellen Kirschman
Guilford Publications, 2006 • [Medicine and Health](#) • [Philosophy and Self-help](#)



☞☞ For example, for some people the smell of freshly baked bread triggers childhood memories. **Freshly cut grass is another common smell that evokes memories.** A certain perfume worn by your mother or grandmother is another direct link to memories.☞☞ [\(view in book\)](#)



CENTURY, an AI-powered teaching and learning platform

<https://www.century.tech/>



CENTURY [Register for a webinar](#)

Supercharge your teaching

CENTURY is the tried and tested intelligent intervention tool that combines learning science, AI and neuroscience.

- Identifies gaps
- Addresses misconceptions
- Supports teacher interventions

Schools/Colleges: Register for a webinar

Parents: Buy a subscription



Voice Kit

Do-it-yourself intelligent speaker. Experiment with voice recognition and the Google Assistant.

<https://aiyprojects.withgoogle.com/voice/>

The AIY Voice Kit from Google lets you build your own natural language processor and connect it to the Google Assistant or Cloud Speech-to-Text service, allowing you to ask questions and issue voice commands to your programs. All of this fits in a handy little cardboard cube, powered by a Raspberry Pi.

Voice Kit 應用



聲控水機



AI 分類回收機



以科技解決社
會上的問題

野豬滋擾問題

流浪牛問題

以科技解決社會上的問題



MACHINE LEARNING

Google

野豬滋擾問題



全部 新聞 圖片 影片 地圖 更多

設定 工具

約 125,000 項搜尋結果 (0.31 秒)

「豬」出沒注意！香港點「人性化」解決野豬滋擾問題？ - 思考HK

www.thinkhk.com/article/2019-02/13/32916.html

2019年2月13日 - 近年來，**野豬**在香港大量繁殖，對公眾造成**滋擾**，已構成嚴重的社區衛生問題，**野豬**出沒或造成**滋擾**的投訴個案持續上升。

漁農自然護理署野豬滋擾

https://www.afcd.gov.hk/tc_chi/conservation/con.../con_fau_nui_pig.html

野豬(學名為Sus scrofa)是本地體型最大的陸棲哺乳動物，成豬體重可達200公斤及體長達2米。牠們長有厚而粗糙的短毛，毛色為灰棕至黑。幼豬初出生時毛色呈...

立法會十題：野豬造成的滋擾 - Gov HK

【來論】香港要如何解決野豬問題？

f 消息 圖 音

2019-01-14 09:39



圖：資料圖

文：寒柏

近日，又有人被野豬所傷。去年首十個月，漁護署接獲679宗野豬滋擾報告，還有5宗野豬傷人事件。儘管有關野豬傷人的宗數上並不算多，似乎問題並不嚴重，但近年

「豬」出沒注意！香港點「人性化」解決野豬滋擾問題？

2019-02-13

Like 12 Share 消息 圖 音 A A A

今年是農曆豬年，「豬鮮惹人愛」的豬仔博得無數市民喜愛，但同樣惡豬，不時出沒在田間地頭的野豬就不那麼受歡迎。近年來，野豬在香港大量繁殖，對公眾造成滋擾，已構成嚴重的社區衛生問題，野豬出沒造成滋擾的投诉個案持續上升。數據顯示，漁護署2011年收到1025宗有關野豬的投訴，2013年有204宗，2018年則有31宗投訴。漁護署

【野豬襲黃大仙】野豬滋擾投訴倍增 漁署拒透露避孕試驗計劃進度

野豬避孕試驗計劃變X file
邊區有做到？
初步成效點？
漁護拒答
議員：點監察！

突發

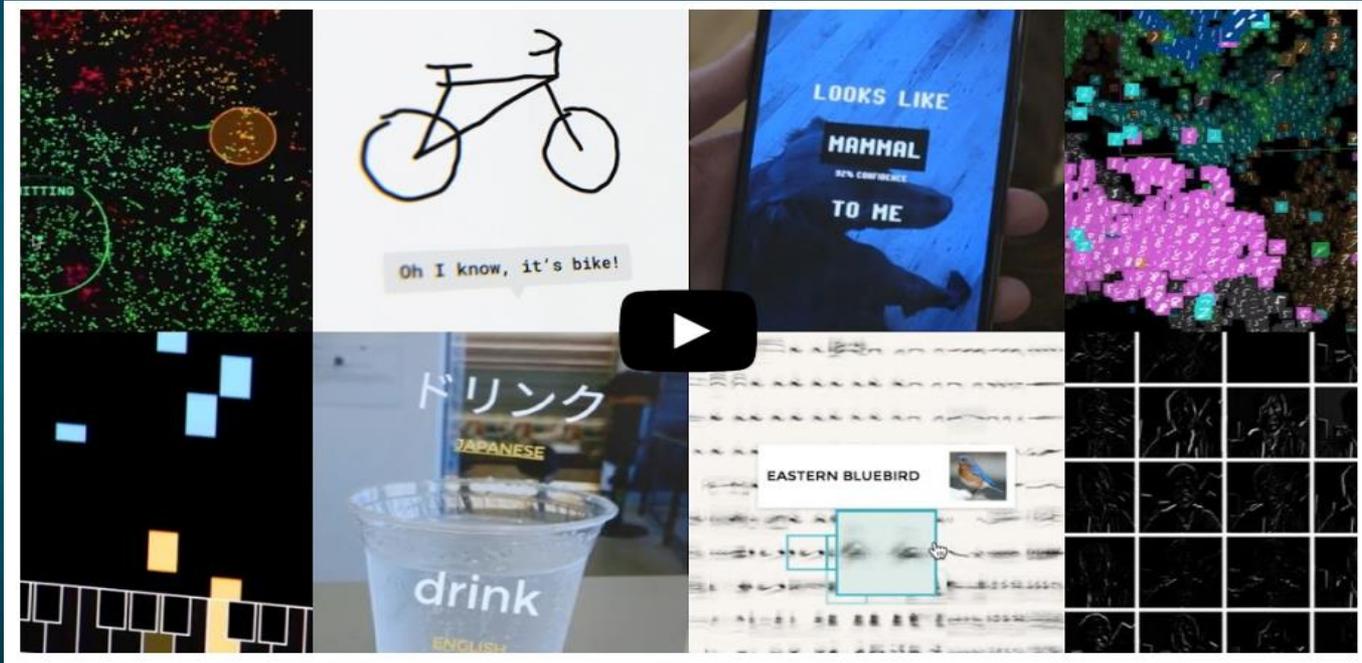
原文、圖片 © 2018-10-11 00:00 最後更新日期：2018-10-11 11:12

野豬為患，有建議引入「天敵」冀解決問題，惟漁護署暫不考慮。

1/3

Experiments with Google (AI)

<https://experiments.withgoogle.com/collection/ai>



Learning Phases

體驗人工智能科技
引起學習興趣
探索未知



Experience

學習A.I.知識與技能
建立基礎



Understand

掌控所學
發揮創意力
設計作品



Control

Face AI

- 動作
- 外觀
- 音效
- 事件
- 控制
- 偵測
- 運算
- 變數
- 函式積木

Face AI

- Detect Face
- When Face Detected
- Age
- Gender Male
- Smile
- Emotion neutral
- Beauty
- Skin Status health
- Ethnicity ASIAN
- Create Face Class ClassA
- Add Face Tom Class ClassA
- Search Face Class ClassA

TensorFlow

- 讀取 CSV D:\data.csv 到
- 讀取 CSV D:\data.csv 到
- 讀取 圖片 D:\training\ xs
- 數據洗牌 xs ys
- 保存模型 名稱 mnist
- 加載模型 拓撲 D:\mnist.json
- 初始化模型 輸入維度 224x224
- 模型 添加密集層 unit 1
- 模型 添加Conv2D層 核
- 模型 添加Maxpool2D層 尺

Kittenblock

mBlock v5 人工智能 (認知服務)

當 被點一下

開始 香港話(繁體) 語音識別, 持續 2 秒

說 語音識別結果

當 被點一下

在 1 秒後辨識人臉年齡

說 年齡識別結果

當 被點一下

在 1 秒後辨識人臉情緒

說 高興 的指數

當 被點一下

在 2 秒後辨識英文手寫文字

說 文字辨識結果



CHEUNG Chun Wai | 100/100 Draft

Not returned | Return

Search the menus (Alt+ /)

Background | Layout | Theme | Transition

- 1. Module 1 Introduction to AI
- 2. How Artificial Intelligence is Impacting Our Everyday Lives?
- 3. Speech emotion detection
- 4. Handwriting recognition
- 5. Facial recognition
- 6. Image recognition
- 7. Self-driving car

Module 1
Introduction to AI

Click to add speaker notes



Files
Handed in on 6 Apr, 18:55
See history
CHEUNG Chun Wai - ...

Mark
100/100

Private comments
Add private comment...
Cancel Post



CHEUNG Chun Wai 100/100 Draft

Not returned Return

Search the menus (Alt+)

Rich text editor toolbar with icons for undo, redo, bold, italic, underline, text color, background color, link, unlink, list, indent, outdent, and zoom.

Vertical slide navigation pane showing thumbnails for slides 11 through 17.

Main slide content area with a green and blue border. It features the word 'MISSION' in a blue pill-shaped box with a target icon, the title 'AI controlled door', and the text 'Now, we need to make the door controlled by voice or image recognition.' Below this is a yellow highlighted text box containing 'Mission accomplished status Link'.

Click to add speaker notes

Vertical navigation icons for files and mark.

Files section: Handed in on 7 Apr, 11:12, See history, CHEUNG Chun Wai - ...

Mark section: 100/100

Private comments section: Add private comment..., Cancel, Post



MISSION

Mission 3: Show image recognized

Now we are trying to use **image recognition**.

You may use either “recognize Image Recognition” or “recognize common object” in mBlock 5.

Recognize an image with your device camera and display the result.



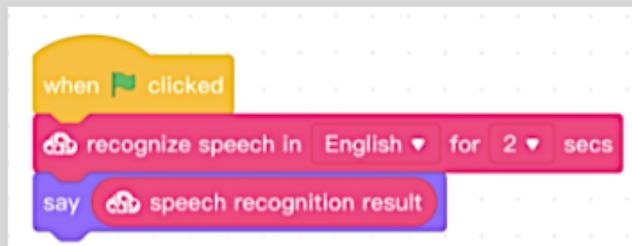






Put your program image here.

Hint :



padlet.com/khikwan/pgmdnd5ybsywq9ns

King Hei, Alex KWAN + 16 + 16/18

AI Room Mission Check list

Put your name under the missions if you have finished the mission

Mission 2: Plan how to use these AI functions in your room	Mission 3: Choose the rooms as backdrops and name the room(s)	Mission 4: Code your room (backdrops) with Voice recognition	Mission room with recognit
SIU Pak Yin 02:59 adrian	MAK Cheuk Kiu Isaac 02:59 Isaac	Leung Wing Sum Sam 02:59 sam	MAK Cheuk Kiu Isaac 02:59 Isaac
TSOI Chung Hon 02:59 Canice	CHOI Yin Yui 02:59 Jayden Choi	SIU Pak Yin 02:59 adrian	CHOI Yin Yui 02:59 Jayden Choi
INDIRANIAN Christie Lynne 02:59 XxChristieXx!_!	Leung Wing Sum Sam 02:59 sam	PANG Kin Hei 02:59 Anthony	Leung Wing Sum Sam 02:59 sam
Agnes Lau (dc) 02:59 Agnes L	WONG Kin Long 02:59 Timothy	TSOI Chung Hon 02:59 Canice	PANG Kin Hei 02:59 Anthony
	SIU Cho Kiu 02:59		SIU Pak Yin 02:59

Windows taskbar: Desktop, 12:16 PM, 5/14/2021

padlet

CHAN Kai Yu + 18 + 1/21

4P Artificial intelligence (AI) with mBlock

Mission achievement chat

Lesson 1 - Mission 1 Say " Hello AI"	Lesson 1 - Mission 2 Say other thing in English	Lesson 1 - Mission 3 Say in other language	Lesson 2 - Mission 1 (Make a new custom "open door")	Lesson 2 - Mission 2. (Close the door by Voice control)
Arron 30		Arron 30	Helen 10 (~ ~ ~ ~) ~	rex pang
Vienna 17	davin 23	Vienna 17	davin 23	Helen 4p 10 (~ ~ ~ ~) ~
Gianne 1	Helen 10	Gianne 1		Ryan 8 4P
Trevor13	Rieann 4P 16 🗨️	Carson 02	rex pang 18	REx Ng
rex pang 18	Tweetie 6	davin 23	Gianne 1	Zita 7
davin 23	Zita 7	Helen 10	Make a new custom "open door"	BRENDEN
Helen 10	Novia 🗨️	rex pang 18	Arron 30	
Tweetie 6	Ryan 8	Rieann 4P 16 🗨️	Carson 02	
Rieann 4P 16 🗨️	Haymas 14	BRENDEN	BRENDEN	
	Frank 25			



THANK YOU