



Build Intelligent Apps with AI

AI应用开发 -
使用**Azure**认知服务
计算机视觉

July 2020
Microsoft Reactor | Ryan Chung

led by player to
.load_image("kg.png")
(self):
ialize Dog object and create Text o
g, self).__init__(image = Dog.image
x = games.mouse.x
bottom = games.screen.
re = games.Text(value = 0, size = 2
top = 5, right = game
reen.add(self.score)
a = games.Text(value = 0, size = 2
top = 5, left = game
reen.add(self.balloon)



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Reactor



developer.microsoft.com/reactor/
@MSFTReactor on Twitter

AI On-line Workshop agenda 人工智能应用在线研讨会议程

19:30	Welcome 开场
19:35	Overview of AI 人工智能介绍
20:00	Get Images Description by Azure Cognitive Services 影像辨识
20:20	5 -minute lab break 中场休息 / 实作练习
20:25	Credit Card Number Recognition 信用卡号码辨识
20:45	Translator Service 文本翻译
21:00	Event end 研讨会结束

“简而言之，人工智能就是
电脑目前还办不到的事情”

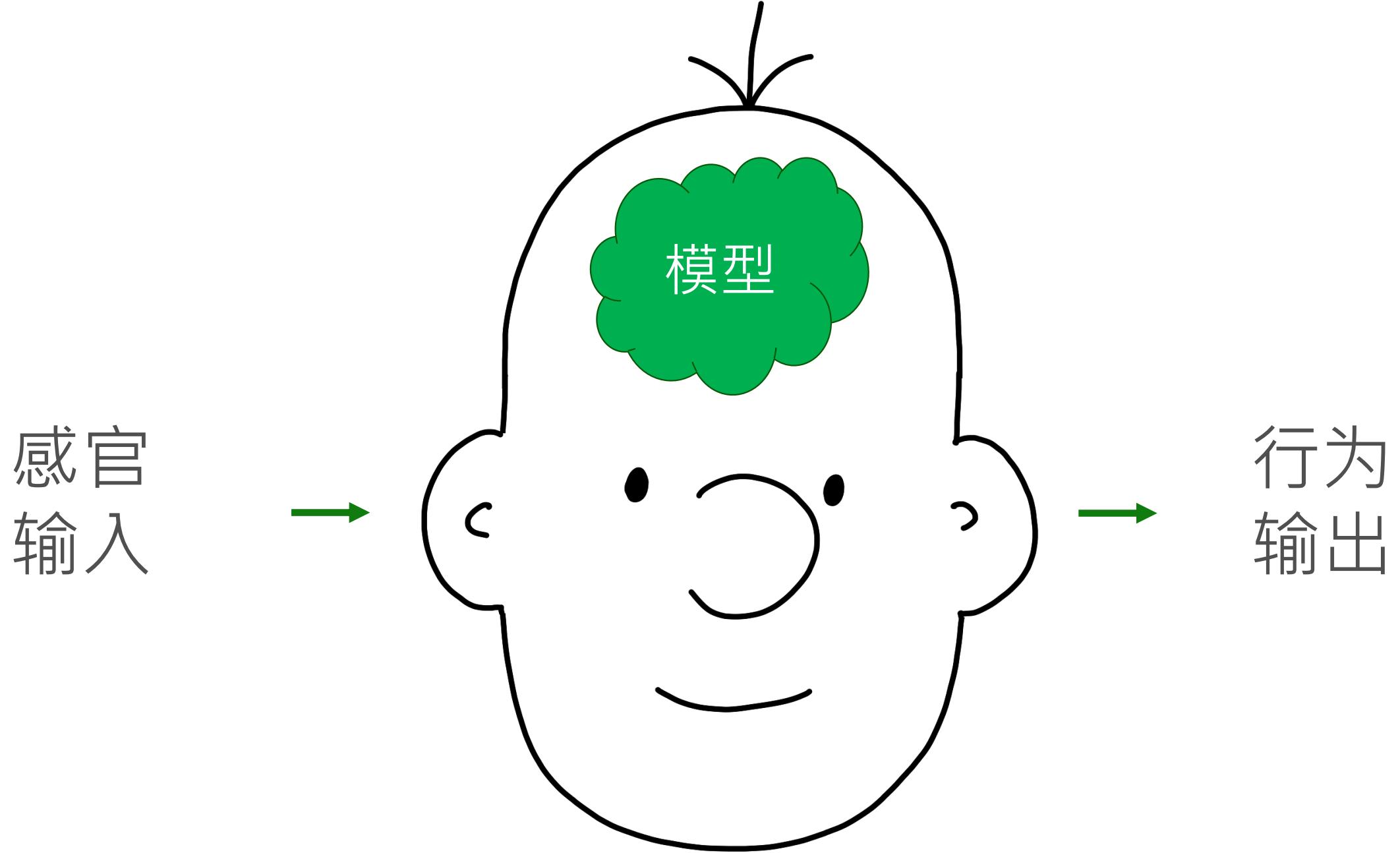
Chris Bishop, Microsoft Research

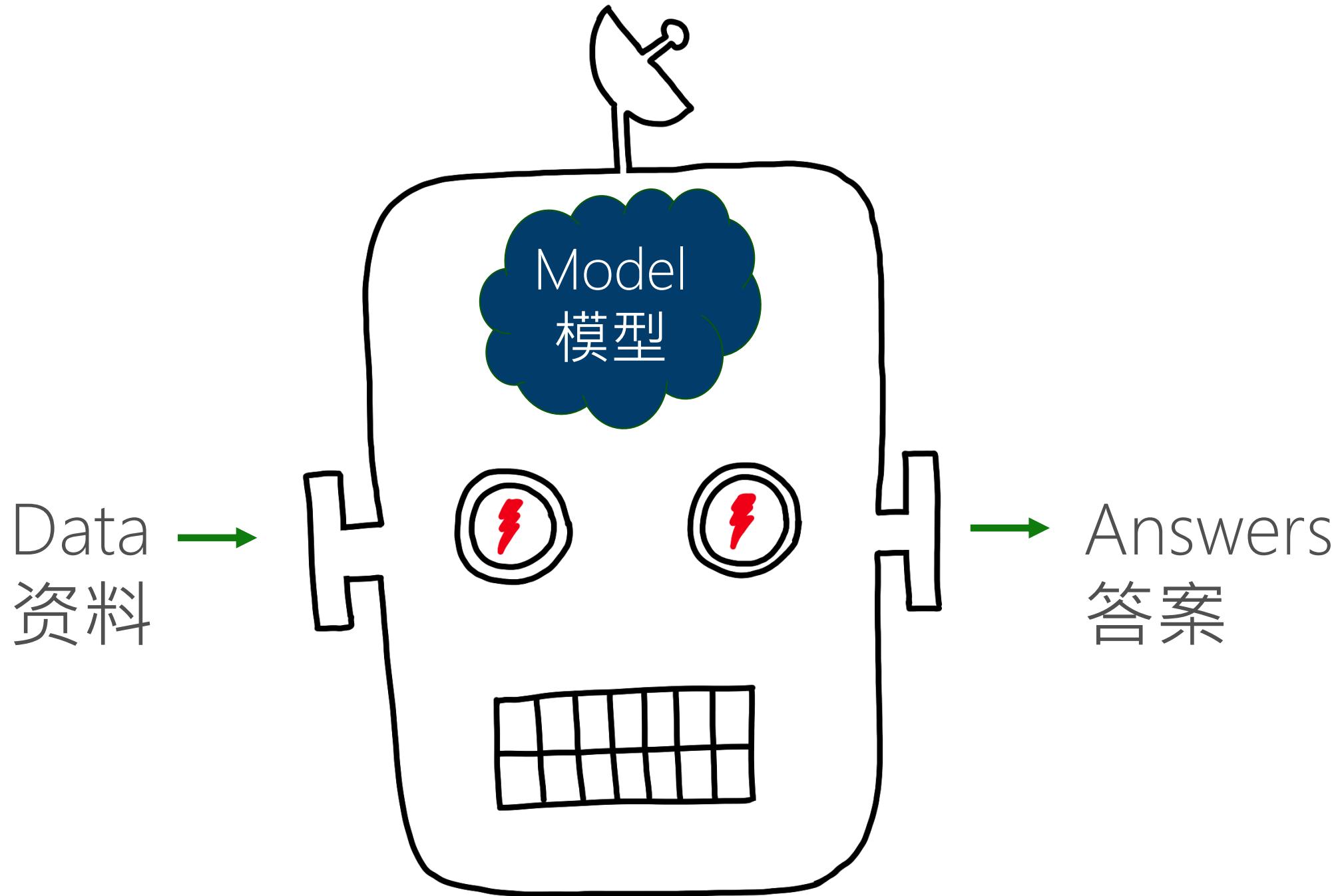
“科学与工程造就了
智慧机器的发展，特别在于
智能电脑应用”

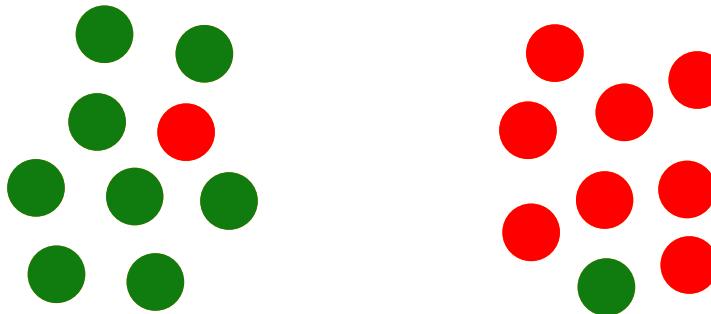
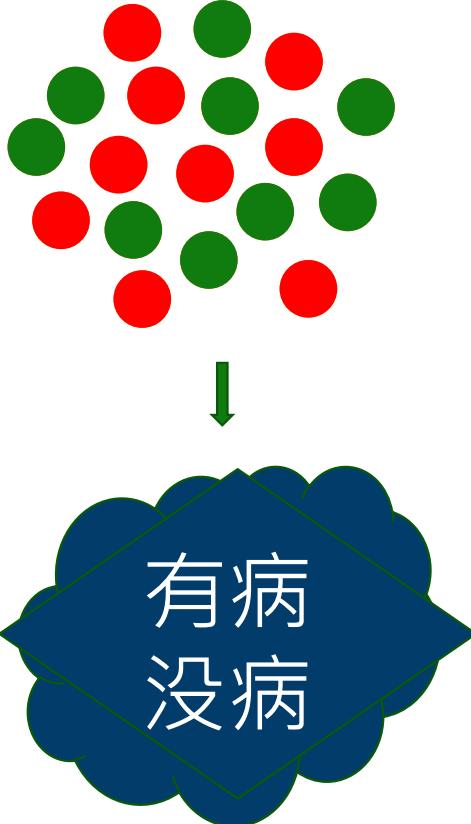
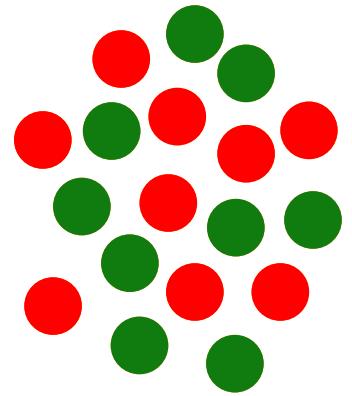
John McCarthy,
The Dartmouth Conference, 1956

“人工智能企图让电脑
可以像人类般地思考、做为”

Rick Barazza, Microsoft







这就是透过机器学习来运作!

机器学习基本要素

Age	Income	Education	Gender	Housing
61	\$65,000	Moderate	F	Own
42	\$72,000	High	F	Rent
18	\$25,000	Moderate	M	Other
22	\$36,000	Low	M	Rent

Training data
训练资料

31	\$52,000	High	M	?
----	----------	------	---	---



已知条件

"features", "attributes"

特征值、属性

预测未知

"class", "label"

分类、标签

人工智能 VS. 机器学习

Artificial Intelligence 人工智能

可应用于产业中的解决方案 或
已可运用的预训练模型(例如Azure认知服务)

Machine learning 机器学习

自己建立与训练模型
于特殊情境或研究练习使用

人工智能在哪里被用上呢？



PROGRESSIVE®

Progressive公司运用微软
Azure Bot Service与认知服务
来建立 Flo聊天机器人，
回答客户问题以及提供报价

UBER

Uber 优步运用
Azure认知服务人脸辨识
Face API来确认司机是否
与APP登入身分账号相符





微软的目标：

让每个人都可以
使用人工智能!

Making AI
available to
everyone

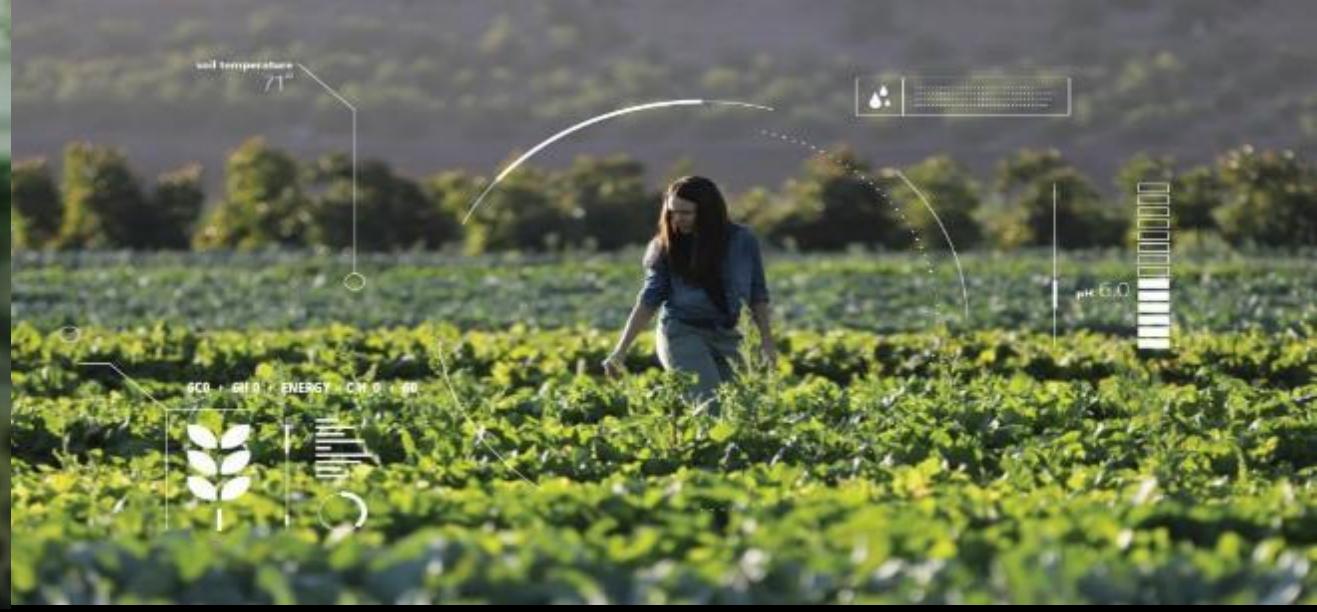


我们致力于让人工智能被落实在每个人、每个组织，大家都可以利用人工智能解决我们社会、经济上最急迫的问题。

– Satya Nadella, CEO, Microsoft



Microsoft AI for Good



微软人工智能公益专案





Wild Me + Microsoft 认知服务

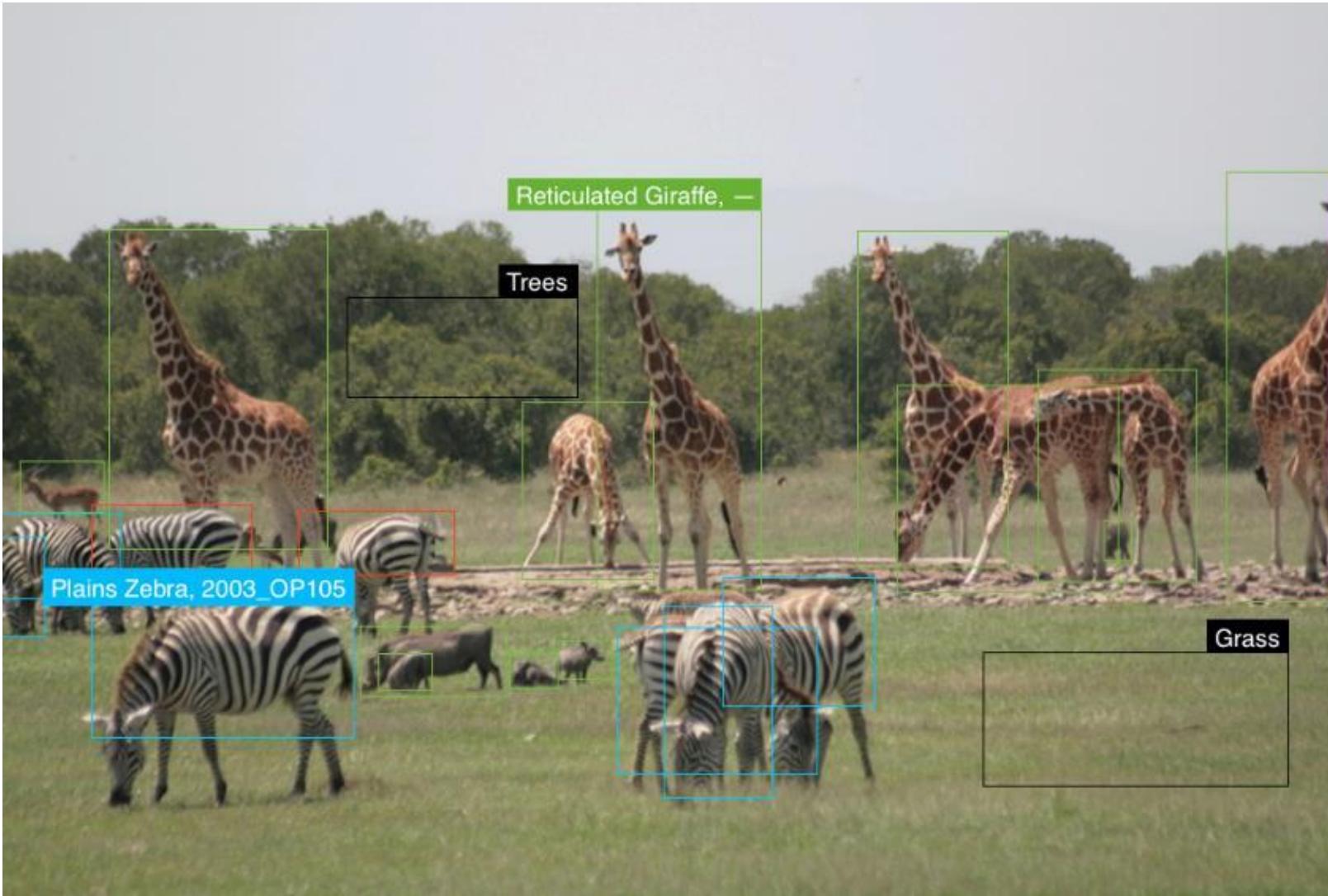
Encounter

Location	Ghana
Sex	Unknown
Assigned ID	H-019
Size	Unknown
Number	ffab795b5-cb3b-4fac-b9d8-b1b72495c0af

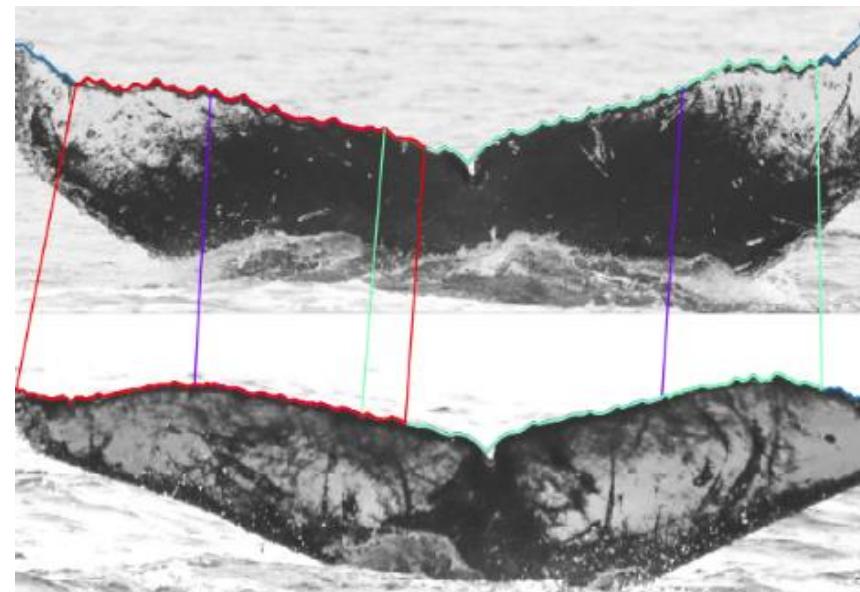
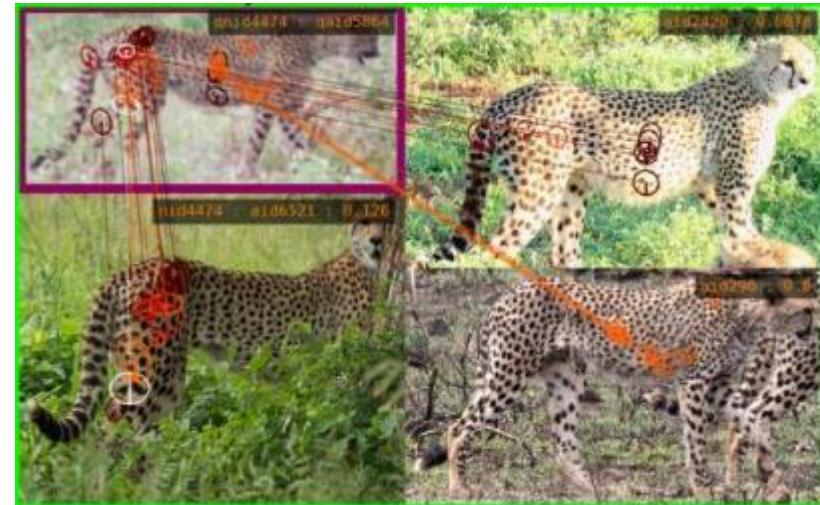
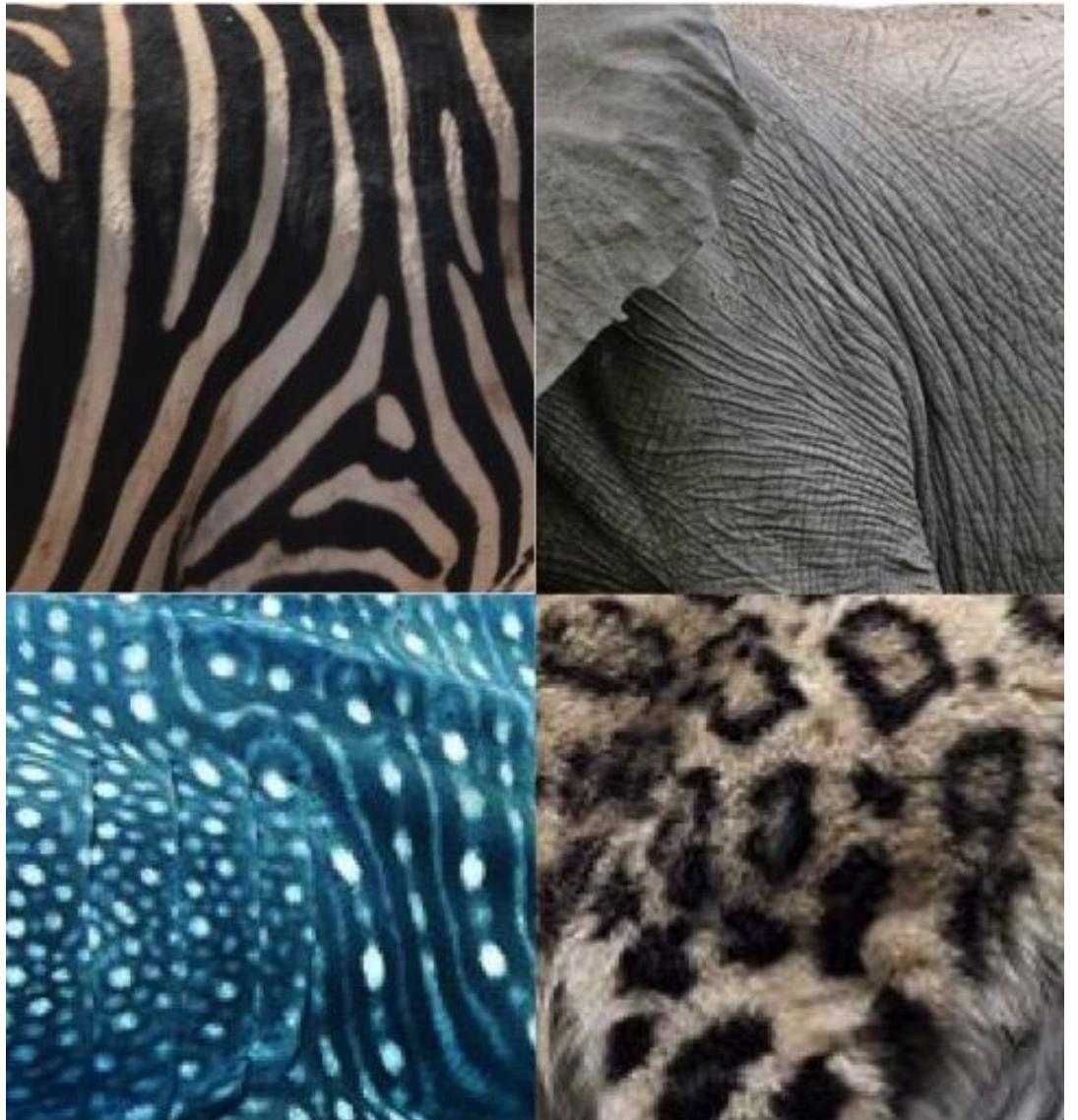
Match Previous Forward

给个体动物加上标签，就像人类的指纹一样。

影像分析：物种判断

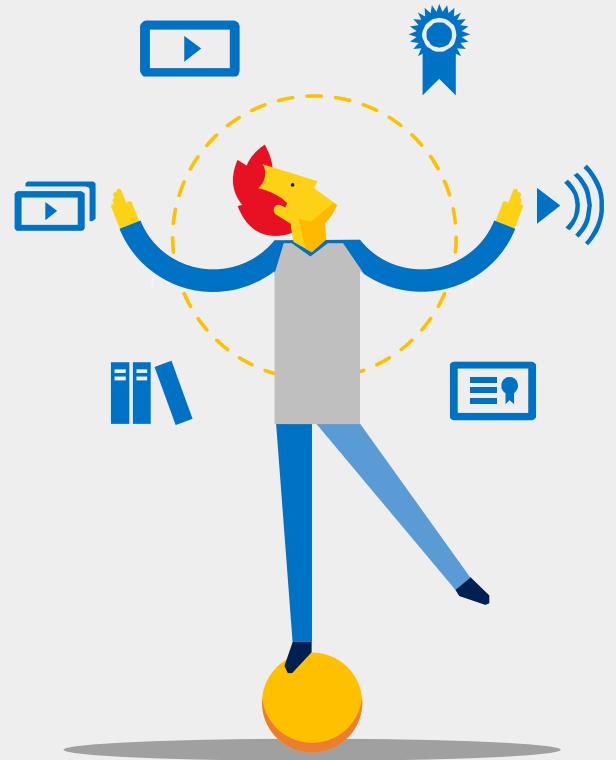


影像分析：能判断出每一个独特的个体



微软Azure认知服务实作

计算机视觉、语言翻译



辨识服务 MS Cognitive Service

- 影像
 - 计算机影像 – 分析图像中的内容
 - 图像概观 – 不同语言显示
 - 图像中的文字 – 信用卡卡号辨识
- 语言
 - 文本翻译 -检测并翻译 60 多种支持的语言
 - 语句翻译 – 尝试不同语言输入输出



<https://azure.microsoft.com/zh-cn/services/cognitive-services/#api>

辨识服务 MS Cognitive Service

- **辨识**

- 可聪明地识别、标示及控管图片的影像处理算法。

- **知识**

- 对应复杂资讯和资料，以解决智慧建议和语意搜寻等工作。

- **语言**

- 让您的应用程序能够透过预先建置的指令码处理自然语言、评估情感，以及了解如何辨识使用者想要的项目。

- **语音**

- 将语音转换成文字、使用语音来验证，或将说话者辨识新增至您的应用程序。

- **搜寻**

- 将 Bing 搜寻 API 新增至您的应用程序，并充分利用以单一 API 呼叫合并数十亿个网页、影像、影片和新闻的能力。

UBER

GRAYMETA

PIC+COLLAGE



Dixons
Carphone

pivothead

vizioglobe



PRISM SKYLABS

dutchcrafters

微软认知服务



联系销售人员

搜索

我的帐户

门户

登录

概述 解决方案 产品 文档 定价 培训 市场 合作伙伴 支持 博客 更多

免费帐户 >

试用认知服务

借助认知服务，仅用几行代码即可通过功能强大的算法生成智能应用。免费试用
认知服务 API 几分钟。

[若要长期使用或增加配额，请注册免费 Azure 帐户 >](#)

探索认知服务：[目录](#) [定价](#) [文档](#) [登录](#)

<https://azure.microsoft.com/zh-cn/try/cognitive-services/>

选择计算机影像 -> 获取 API 密钥

概述 解决方案 产品 ▾ 文档 定价 培训 市场 ▾ 合作伙伴 ▾ 支持 ▾ 博客 更多 ▾



门户

免费帐户 >

认知服务 - 视觉 API

认知服务 - 语音 API

认知服务 - 语言 API

认知服务 - 搜索 API

认知服务 - 决策 API



计算机影像

从图像中提取可操作信息

获取 API 密钥

5,000 个事务，每分钟 20 个。



人脸

检测、识别、分析、组织和标记照片中的人脸

获取 API 密钥

30,000 个事务，每分钟 20 个。



墨迹识别器 预览版

识别内容中的数字墨迹

获取 API 密钥

每月 2,000 个免费事务

选择 7 天试用 (之后可建立免费 Azure 帐户使用)

×

免费试用认知服务

来宾

7 天试用

免费评估认知服务

开始使用

- 无需信用卡
- 试用后不保存数据

免费 Azure 帐户

\$0/月

试用 Azure 免费帐户

注册

- 在 Azure 上获取 \$200 额度
- 免费访问权限，永不过期
- 保存数据和自定义项

现有 Azure 帐户

已有 Azure 帐户？

登录

- 完整的 SLA 报告
- 企业级性能
- 完整的 Azure 产品集成
- 按需无缝扩展

同意 -> 选择国家/地区 -> 下一步



Microsoft 认知服务条款

请查看免费试用版的服务条款。

我同意在使用此免费试用版时受 [Microsoft 在线订阅协议](#) 的约束，其中包含[联机服务条款](#)。若是预览版，则受[预览补充条款](#)中的其他条款约束。

请选择你的国家/地区

国家/地区

中国



我希望收到有关 Microsoft Azure 及其他 Microsoft 产品和服务的信息、提示和优惠。[隐私声明](#)

我接受

下一步

选择任一种帐号进行登录

- 顺利登入后即可在页面上取得API密钥，后面练习会使用到

×

登录以继续

请使用首选帐户登录以开始使用



Microsoft



Facebook



LinkedIn



GitHub

一般Azure帐号取得API密钥程序

- 申请免费Azure账号

<https://aka.ms/Azurefreechina>

The screenshot shows the Microsoft Azure homepage with a dark theme. At the top, there's a navigation bar with links for Overview, Solutions, Products, Documentation, Pricing, Training, Markets, Partners, Support, Blogs, and More. On the right side of the top bar are links for Contact Salesperson (with a phone icon), Search (with a magnifying glass icon), My Account, Portal, and Log In. A green button labeled "Free Account >" is located on the far right. Below the navigation bar, a blue banner features the text "了解 Microsoft 如何应对 COVID-19 疫情, 并获取有帮助的资源 >". The main content area has a dark background. On the left, there's a large white text box containing the heading "原因所在。有目的地发明。" and a subtext about using over 100 services to create solutions. A green button at the bottom left says "免费开始使用 >". On the right, there's a diagram illustrating Azure Edge Zone architecture, showing three components: "Azure Edge Zone", "Azure Edge Zone with carrier", and "Azure Private Edge Zone", all interconnected. Below the diagram, a text box states "宣布推出 Azure Edge Zone: 通过 Edge Zone 和 5G 提供超低延迟的体验 >".

进入 Azure

- + Add 添加 -> Cognitive Services -> Computer Vision

The screenshot shows the Azure Cognitive Services Marketplace page. At the top left, there is a red box around the '+ Add' button. The main area displays a grid of cognitive services under the heading 'AI + Machine Learning > Cognitive Services'. One service, 'Computer Vision', is highlighted with a red box. The 'Computer Vision' card includes the Microsoft logo, a blue eye icon, and the text: 'An AI service that analyzes content in images'.

Cognitive Services
預設目錄

+ Add Columns Refresh Assign Tags

Subscriptions: Pay-As-You-Go

Filter by name... All resource groups All locations No grouping

Home > Cognitive Services > Marketplace

Marketplace

Service Providers

Categories

- Get Started
- AI + Machine Learning
- Analytics
- Blockchain
- Compute
- Containers
- Databases
- Developer Tools
- DevOps
- Identity
- Integration

AI + Machine Learning > Cognitive Services

Bing Autosuggest	Bing Custom Search	Bing Entity Search	Bing Search
Microsoft Help users complete queries faster by adding intelligent type-ahead capabilities	Microsoft Create a custom search engine with ad-free results	Microsoft Recognize and classify named entities, and find search results based on them	Microsoft Enable safe, ad-free search for your users with Bing, a leading search engine
Bing Spell Check	Computer Vision	Content Moderator	Custom Vision
Microsoft Help users identify and fix word breaks, slang, names, homonyms, and brands	Microsoft An AI service that analyzes content in images	Microsoft An AI service that detects unwanted content	Microsoft An AI service and end-to-end platform for applying computer vision to your specific scenario

建立服务

Computer Vision API
Microsoft

Do you need an API that gives you actionable information about images used in your app? The Computer Vision API gives you the tools to understand the contents of any image. Create tags identifying objects, beings, or actions present in the image, and then craft coherent sentences to describe it.

Use Computer Vision API to:

- Generate tags as well as coherent full-sentence descriptions of images
- Read printed text from images
- Read handwritten text from images
- Recognize celebrities and landmarks
- Analyze video in near real-time
- Generate a thumbnail

Legal Notice

Microsoft will use data you send to the Cognitive Services to improve Microsoft products and services. For example, we will use content that you provide to the Cognitive Services to improve our underlying algorithms and models over time. Where you send personal data to the Cognitive Services, you are responsible for obtaining sufficient consent from the data subjects. The General Privacy and Security Terms in the [Online Services Terms](#) do not apply to the Cognitive Services.

Please refer to the Microsoft Cognitive Services section in the [Online Services Terms](#) for details.

Note: Microsoft offers policy controls that may be used to disable new Cognitive Services deployments. [Learn more](#)

Create

Create
Computer Vision API

* Name

VisionPractice



* Subscription

Pay-As-You-Go



West Central US

* Location

Southeast Asia



* Pricing tier ([View full pricing details](#))

F0 (20 Calls per minute, 5K Calls per month)

* Resource group

Create new Use existing

HelloVision



* I confirm I have read and understood the notice below.

Microsoft will use data you send to the Cognitive Services to improve Microsoft products and services. Where you send personal data to the Cognitive Services, you are responsible for obtaining sufficient consent from the data subjects. The General Privacy and Security Terms in the Online Services Terms do not apply to the

Pin to dashboard

Create

Automation options

取得 API KEY

HelloVision - Keys
Cognitive Services

Search (Ctrl+ /)

Overview

Activity log

Access control (IAM)

Tags

Diagnose and solve problems

RESOURCE MANAGEMENT

Keys

Quick start

Pricing tier

Properties

Locks

Regenerate Key1 Regenerate Key2

Notice: It may take up to 10 minutes for the newly (re)generated keys to take effect.

NAME

KEY 1

KEY 2

This screenshot shows the 'Keys' blade for a Cognitive Services resource named 'HelloVision'. The left sidebar lists navigation options like Overview, Activity log, Access control (IAM), Tags, and Diagnostic tools. Under 'RESOURCE MANAGEMENT', the 'Keys' option is selected, highlighted with a light blue background. The main content area displays two regenerated API keys. At the top, there are two 'Regenerate Key' buttons: 'Regenerate Key1' (with a circled 1 icon) and 'Regenerate Key2' (with a circled 2 icon). A note below the buttons states: 'Notice: It may take up to 10 minutes for the newly (re)generated keys to take effect.' Below the note are two text input fields labeled 'NAME' and 'KEY 1', each with a copy icon to its right. Further down is another text input field labeled 'KEY 2' with a copy icon to its right. The entire page has a dark header bar with the service name and a standard top-right close button.

影像识别：图片网址

- 输入图片网址，可回传图片资讯

Analyze image:

Enter the URL to an image of a natural or artificial landmark, then click the **Analyze image** button.

Image to analyze:

Response:

```
    },
    "description": {
        "tags": [
            "cat",
            "sitting",
            "indoor",
            "white",
            "looking",
            "top",
            "camera",
            "standing",
            "table",
            "grey",
            "gray",
            "front",
            "wooden",
            "brown",
            "eyes",
            "perched"
        ],
        "captions": [
            {
                "text": "a cat that is looking at the camera",
                "confidence": 0.9437901781680822
            }
        ]
    },
    "color": {
        "dominantColorForeground": "Black",
        "dominantColorBackground": "Brown",
        "dominantColorText": "White"
    }
}
```

Source image:



测试

- 下载范例
- 填上API KEY，开始测试

輸入一個圖片網址，然後按下 分析圖片 按鈕.

Image to analyze:

Response:

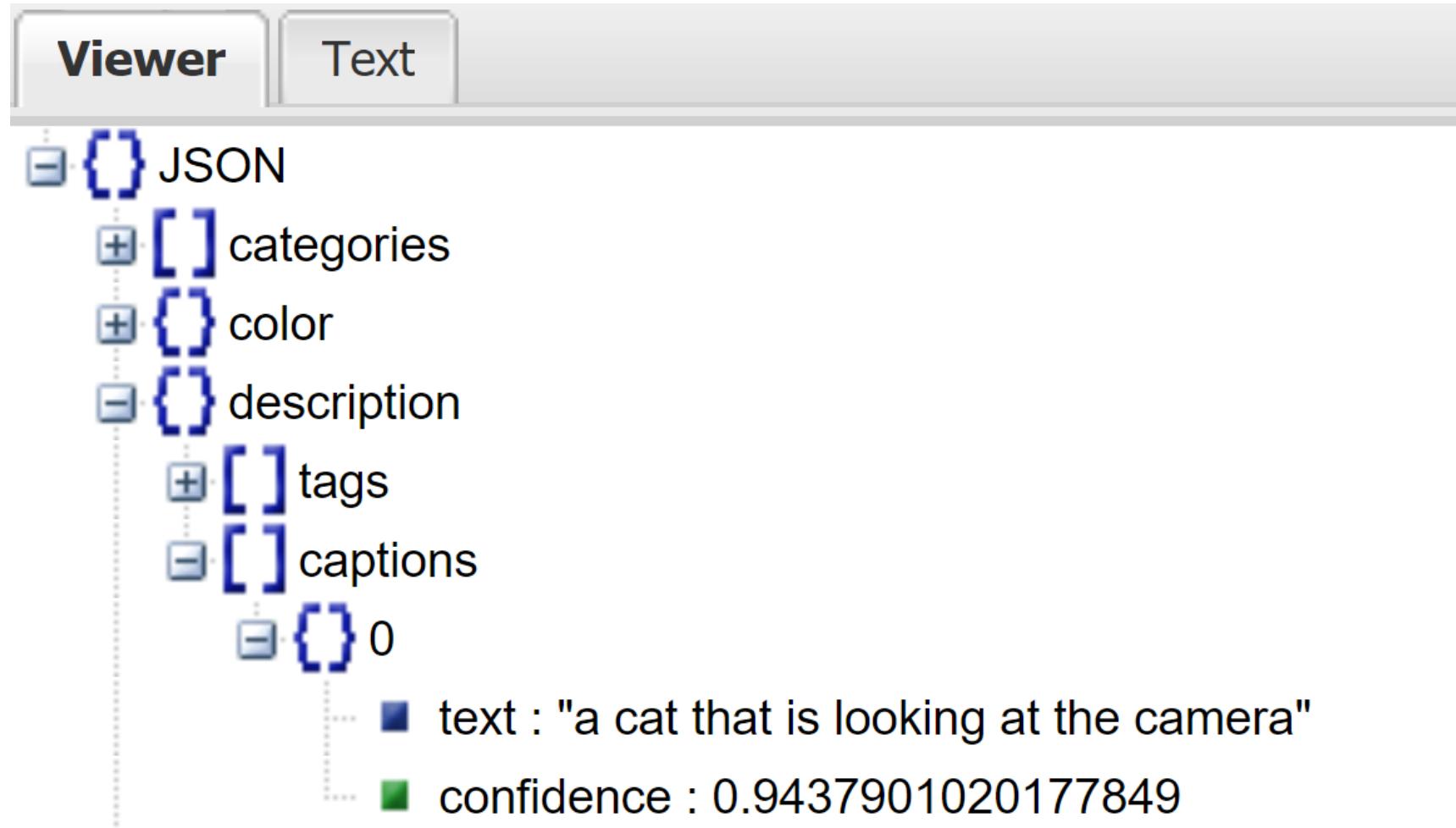
```
"grin",
"eyes",
"blue",
"laying",
"mouth",
"hat",
"field"
],
"captions": [
{
  "text": "a close up of a dog",
  "confidence": 0.9357016076120018
}
]
},
"color": {
  "dominantColorForeground": "Black",
  "dominantColorBackground": "Black",
  "dominantColors": [
    "Black",
    "Brown"
  ],
  "accentColor": "90603B",
  "isBwImg": false
},
```

Source image:



JSON 文件检视器

- JSON Viewer (<http://jsonviewer.stack.hu/>)
- 把微软回传的内容贴至Text文字区，再切换至Viewer检视器看看



练习一：在图片下方显示 AI 产生的图说

- 了解回传内容的文件结构
- 将欲显示的内容呈现于图片下方的段落

Analyze image:

輸入一個圖片網址，然後按下 分析圖片 按鈕。

Image to analyze:

Response:

```
{  
  "categories": [  
    {  
      "name": "animal_cat",  
      "score": 0.99609375  
    }  
  ],  
  "color": {  
    "dominantColorForeground": "Black",  
    "dominantColorBackground": "Brown",  
    "dominantColors": [  
      "Black",  
      "Brown",  
      "White"  
    ],  
    "accentColor": "BD760E",  
    "isBwImg": false,  
    "isBWImg": false  
  },  
  "description": {  
    "tags": [  
      "cat",  
      "sitting",  
      "indoor",  
      "white",  
      "looking",  
      "black"  
    ]  
  }  
}
```

Source image:



a cat that is looking at the camera

电脑视觉API官方文件 – v2.1

- Microsoft Cognitive Service – Computer Vision API – v2.1
- 看看 Request parameters 那一区

details (optional) string A string indicating which domain-specific details to return. Multiple values should be comma-separated.

Valid visual feature types include:

- **Celebrities** - identifies celebrities if detected in the image.
- **Landmarks** - identifies landmarks if detected in the image.

language (optional) string A string indicating which language to return. The service will return recognition results in specified language. If this parameter is not specified, the default value is "en".

Supported languages:

- **en** - English, Default.
- **es** - Spanish.
- **ja** - Japanese.
- **pt** - Portuguese.
- **zh** - Simplified Chinese.

练习一：在图片下方显示 AI 产生的图说

- 了解回传内容的文件结构
 - 将欲显示的内容呈现于图片下方的段落

Analyze image:

輸入一個圖片網址，然後按下 **分析圖片** 按鈕。

Image to analyze: <https://www.petmd.com/site> 分析圖片

Response:

Source image:

```
$("#picDescription").text(data.description.captions[0].text);
```



a cat that is looking at the camera

练习二：将AI产生的图说改成简体中文

- 找到对应的参数
 - 置换成想要显示的语言

Analyze image:

輸入一個圖片網址，然後按下 **分析圖片** 按鈕。

Image to analyze: <https://www.petmd.com/site> 分析圖片

Response:

Source image:



白色的猫

练习二：将AI产生的图说改成简体中文

- 找到对应的参数
 - 置换成想要显示的语言

Analyze image:

輸入一個圖片網址，然後按下 **分析圖片** 按鈕。

Image to analyze: <https://www.petmd.com/site>

Response:

```
var params = {  
    "visualFeatures": "Categories,Description,Color",  
    "details": "",  
    "language": "zh",  
};
```

Source image:



白色的猫

延伸练习：改成可以使用本地档案上传

- HTML 档案上传输入
- 当使用者输入后，拿到档案，注意上传档案API需要设定的参数跟网址处理有什么不同

Analyze image:

輸入一個圖片網址，然後按下 分析圖片 按鈕。

Image to analyze: 2019-09-14 18.00.14.jpg

Response:

```
"reptile",
"water",
"dinosaur",
"elephant",
"lake",
"horse",
"riding",
"standing",
"man",
"large",
"body",
"statue",
"pool",
"baby",
"playing",
"bird",
"snow",
"air"
],
"captions": [
{
  "text": "a statue of a dinosaur",
  "confidence": 0.8849803818812512
}
]
```

Source image:



延伸练习：改成可以使用本地档案上传

index.html

```
Image to analyze: <input type="file" name="inputImage" id="inputImage" data-target="file-uploader" accept="image/*" />
<!--<button onclick="processImage()">分析图片</button>-->
```

main.js

```
$( "document" ).ready( function() {
    $( "#inputImage" ).change( function(e) {
        processImage( e.target.files[0] );
    });
});

function processImage( imageObject ) {
```

延伸练习：改成可以使用本地档案上传

main.js

```
//显示分析的图片
    var sourceImageUrl = URL.createObjectURL(imageObject);
    document.querySelector("#sourceImage").src = sourceImageUrl;
//送出分析
$.ajax({
    url: uriBase + "?" + $.param(params),
    // Request header
    beforeSend: function(xhrObj){
        xhrObj.setRequestHeader("Content-Type","application/octet-stream");
        xhrObj.setRequestHeader("Ocp-Apim-Subscription-Key", subscriptionKey);
    },
    type: "POST",
    processData:false,
    contentType:false,
    // Request body
    data: imageObject
})
```

影像文字内识别：信用卡号码辨识

- 输入信用卡图片网址，可回传信用卡卡号

信用卡卡號辨識

輸入信用卡圖片網址，然後按下【Get Number】按鈕

Image to read: <https://www.snb.com/stuff/cc>

Response:

```
134,  
700,  
134  
],  
"text": "VISA"  
}  
]  
,  
{  
"boundingBox": [  
69,  
308,  
878,  
309,  
878,  
366,  
68,  
365  
],  
"text": "1234 5678 1234 5678",  
"words": [  
{  
"boundingBox": [  

```

Source image:



1234 5678 1234 5678

电脑视觉API – 2.1 – 批次读档

- 针对文字为主的文件，使用OCR算法优化取值
- 手写、打印或混合均适用
- 辨识时间依文字、页数量，会较长

Request URL

`https://[endpoint]/vision/v2.1/read/core/asyncBatchAnalyze`

Request headers

Content-Type

string

Media type of the body sent to the API.

Ocp-Apim-Subscription-Key

string

Subscription key which provides access to this API. Found in your [Cognitive Services accounts](#).

输入档案限制

- 支援JPEG, PNG, BMP, PDF, TIFF
- PDF, TIFF最高可达200页 (免费订阅只会处理前2页)
- 图档必须小于20MB
- 图文件分辨率限制50x50 ~ 10000x10000
- PDF档案分辨率限制17x17 inch, Legal或A3尺寸以下

影像文字内识别：信用卡号码辨识

```
let endpoint = "https://westcentralus.api.cognitive.microsoft.com/";
  if (!subscriptionKey) { throw new Error('Set your environment variables for your subscription key and endpoint.');}

var uriBase = endpoint + "vision/v2.1/read/core/asyncBatchAnalyze";

.done(function(data) {
    // Show formatted JSON on webpage.
    $("#responseTextArea").val(JSON.stringify(data, null, 2));
    let recognitionArray = data.recognitionResults[0].lines;
    for(let x=0; x<recognitionArray.length;x++){
        if(recognitionArray[x].text.length==19){
            $("#RecognitionCardNumber").text(recognitionArray[x].text);
        }
    }
})
```

微软认知服务 – 语言 – 文本翻译 (需 Azure 帐号)

The screenshot shows the Microsoft Azure Cognitive Services - Language - Text Translation page. At the top, there's a navigation bar with the Microsoft Azure logo, a search bar, and links for Sales Representative, Search, My Account, Portal, and Log In. Below the navigation bar, there's a secondary navigation menu with links for Overview, Solutions, Products (selected), Documentation, Pricing, Training, Market, Partners, Support, Blogs, and More. On the right side of this menu, there's a 'Free Account' button. The main content area has a dark background. It features a breadcrumb trail: Home / Products / Cognitive Services / Text Translation. The title 'Text Translation' is prominently displayed in large white font. Below the title, a sub-headline reads '通过简单的 REST API 调用即可轻松进行实时文本翻译'. A blue call-to-action button labeled '免费开始使用 >' is visible. At the bottom of the page, there's a footer bar with links for exploring cognitive services, detailed pricing information, documentation, updates, the portal, and Stack Overflow.

Microsoft Azure

联系销售人员 搜索 我的帐户 门户 登录

概述 解决方案 产品 文档 定价 培训 市场 合作伙伴 支持 博客 更多 免费帐户 >

主页 / 产品 / 认知服务 / 文本翻译

文本翻译

通过简单的 REST API 调用即可轻松进行实时文本翻译

免费开始使用 >

探索认知服务: 定价详细信息 文档 更新 门户 Stack Overflow

Microsoft Translator API 是一种神经网络机器翻译服务，开发人员可以轻松地将其集成到自己的应用程序网站、工具或任何需要多语言支持的解决方案，例如网站本地化、电子商务、客户支持、消息处理应用程序、内部沟通等等。

<https://azure.microsoft.com/zh-cn/services/cognitive-services/translator-text-api/>

Azure 入口 -> 认知服务 -> 建立资源

- 找到 Translator Text

Home > Cognitive Services > Marketplace

Marketplace

IT & Management Tools	Media	Mixed Reality	Networking	Security	Software as a Service (SaaS)	Storage	Web
	 Face Microsoft An AI service that analyzes faces in images	 Speaker Recognition Microsoft An AI service that enables you to identify individual speakers or use speech as a means of verification	 Speech Microsoft An AI service that enables you to embed human-like speech capabilities into your apps	 QnA Maker Microsoft An AI service that enables you to create a bot from your data in minutes			
	 Text Analytics Microsoft An AI service that enables you to unlock insights from natural language text using sentiment	 Translator Text Microsoft An AI service that enables you to easily translate text between more than 60 languages	 Cognitive Services Microsoft Connect powerful AI to your apps	 Anomaly Detector (preview) Microsoft An AI service that helps you foresee problems before they occur			

<https://portal.azure.com/>

按下 Create 建立资源

Home > Cognitive Services > Marketplace > Translator Text

Translator Text

Microsoft



Translator Text

Save for later

Microsoft

Create

Overview Plans

Easily integrate real-time text translation capabilities into your application's websites, tools, or any solution requiring multi-language support such as website localization, e-commerce, customer support, messaging applications, internal communication, and more.

Useful Links

[More about Translator Text API](#)

[Documentation](#)

[API reference](#)

[Pricing](#)

[Regional availability](#)

输入基本资料后按下 Create

- 区域 : 全域
- Name : HiTranslator
- Pricing tier : F0
- Resource group : 可选既有的或是新增

The screenshot shows the Microsoft Azure Marketplace interface for creating a new service. The top navigation bar includes the Microsoft Azure logo, a search bar with placeholder text '搜尋資源、服務及文件 (G+)', and a menu icon. Below the navigation, the breadcrumb trail shows '首頁 > 認知服務 > Marketplace > Translator > 建立 Translator'. The main content area is titled '建立 Translator'. A dropdown menu for '區域' (Region) is open, showing '全域' (Global) as the selected option. A tooltip message next to the dropdown says: 'Please choose the Global region unless your business or application requires a specific region. Applications that do not offer a region selection use the Global region.' Below the region selection, the 'Name' field is filled with 'HiTranslator', which is highlighted with a purple border and a green checkmark. The 'Pricing tier' dropdown is set to 'F0 (2M Up to 2M characters translated per month)'. At the bottom of the form are three buttons: a blue '檢閱 + 建立' (Review + Create) button, a light gray '< 上一步' (Previous Step) button, and a light gray '下一步 : Tags >' (Next Step: Tags) button.

取得密钥

- 复制密钥 1 并注意端点地址是否与范例相符

首頁 > 所有資源 >

 **HiTranslator | 金鑰與端點**
認知服務

<>  重新產生 Key1  重新產生 Key2

 概觀
 活動記錄
 存取控制 (IAM)
 標籤
 診斷並解決問題

資源管理

 快速入門
 金鑰與端點
 定價層
 網路功能
 依訂用帳戶排序的帳單

顯示金鑰

金鑰 1
..... 

金鑰 2
..... 

端點
`https://api.cognitive.microsofttranslator.com/` 

位置 ①
`global` 

输入密钥与检查专案网域，执行范例

翻譯：

輸入一段英文，然後按下 翻譯 按鈕.

Image to analyze: Hello, what is your name?

Response:

翻譯結果：

```
[  
  {  
    "translations": [  
      {  
        "text": "你好，你叫什么名字？",  
        "to": "zh-Hans"  
      }  
    ]  
  }  
]
```

练习一：将翻译结果显示于右方

翻譯：

輸入一段英文，然後按下 翻譯 按鈕。

Image to analyze: Hello, what is your name? 翻譯

Response:

翻譯結果：

```
[  
 {  
   "translations": [  
     {  
       "text": "你好，你叫什么名字？",  
       "to": "zh-Hans"  
     }  
   ]  
 }
```

你好，你叫什么名字？

练习一：将翻译结果显示于右方

```
.done(function(data) {  
    //显示JSON内容  
    $("#responseTextArea").val(JSON.stringify(data, null, 2));  
    $("#translateResult").text(data[0].translations[0].text);  
})
```

语言支持

简体中文

zh-Hans

中文(繁体)

zh-Hant

克罗地亚语

hr

捷克语

cs

丹麦语

da

荷兰语

nl

英语

en

爱沙尼亚语

et

斐济语

fj

菲律宾语

fil

芬兰语

fi

法语

fr

练习二：修改翻译语言

Text to translate: 吃葡萄不吐葡萄皮

翻譯

Response:

翻譯結果：

```
[  
  {  
    "detectedLanguage": {  
      "language": "zh-Hans",  
      "score": 1  
    },  
    "translations": [  
      {  
        "text": "Eat grapes without spitting grape skins",  
        "to": "en"  
      }  
    ]  
  }  
]
```

Eat grapes without spitting grape skins

练习二：修改翻译来源与目的语言

```
let params = {  
    "api-version": "3.0",  
    "to": "en",  
};
```

辨识服务 MS Cognitive Service

- 影像
 - 计算机影像 – 分析图像中的内容
 - 图像概观 – 不同语言显示
 - 图像中的文字 – 信用卡卡号辨识
- 语言
 - 文本翻译 -检测并翻译 60 多种支持的语言
 - 语句翻译 – 尝试不同语言输入输出



<https://azure.microsoft.com/zh-cn/services/cognitive-services/#api>



Reactor



developer.microsoft.com/reactor/
@MSFTReactor on Twitter

议程结束
感谢聆听



请记得填写课程回馈问卷
<https://aka.ms/ReactorFeedback>

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