



创新交互方式， 智能用户体验

——Web开发者新机遇

严飞 Felix Yan

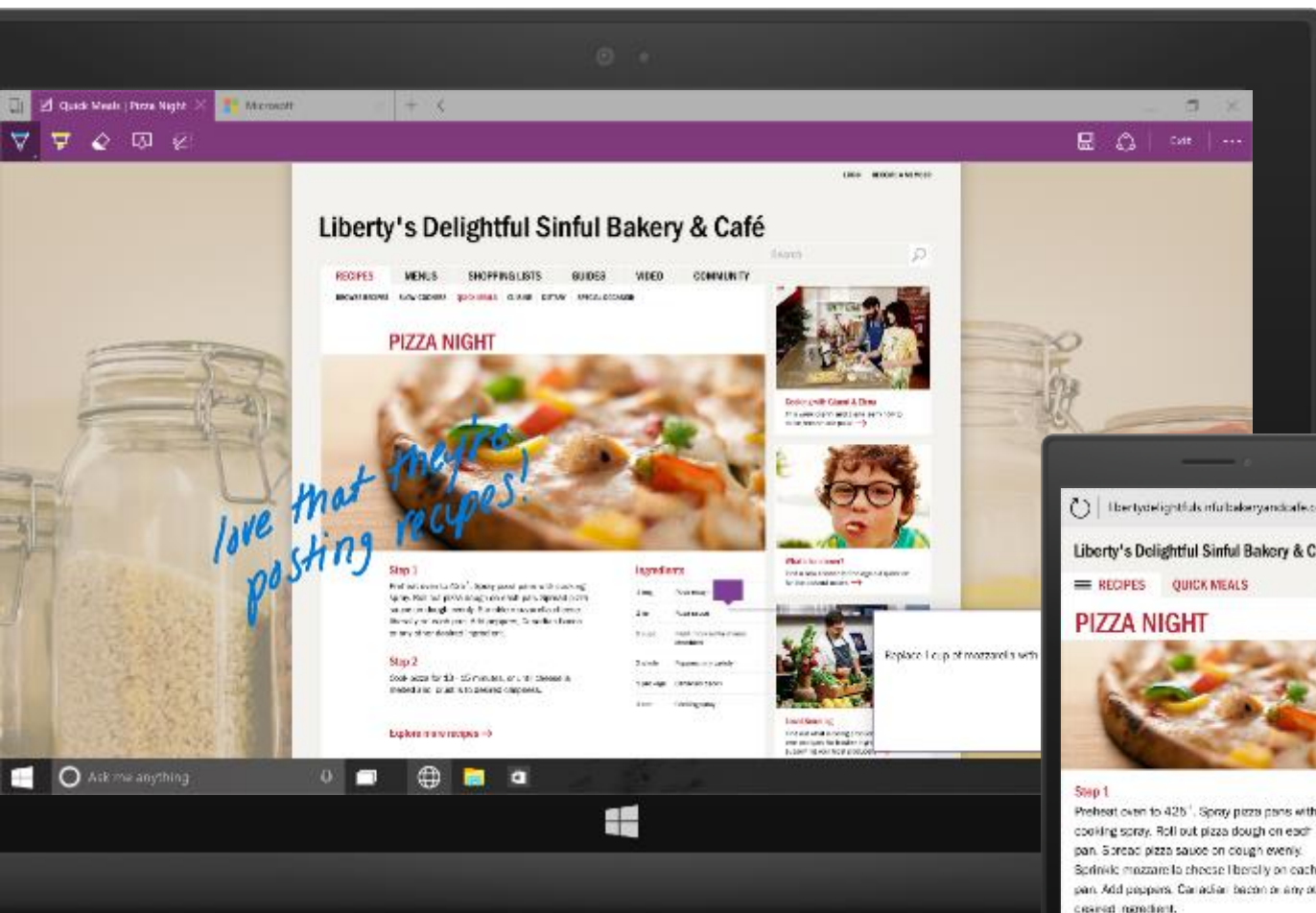
技术顾问总监

微软（中国）开发体验与平台合作事业部

全新的Web浏览体验 – Microsoft Edge



IT大咖说
不止于技术



快速 + 流畅

全新的渲染引擎

支持所有的 Windows 10 设备

自然式的浏览和交互

Touch-friendly 浏览

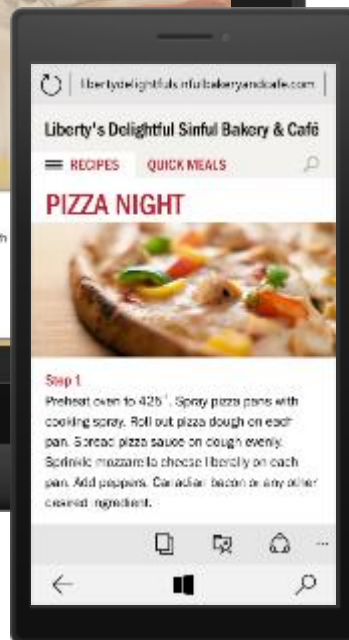
自然的墨迹 (inking) 支持

Cortana 小娜的交互

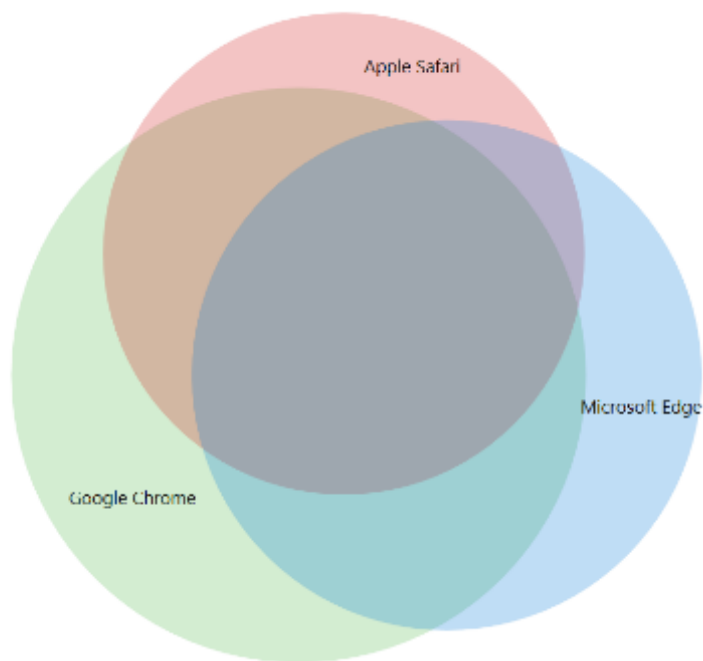
快速地分享浏览内容

为分享进行设计

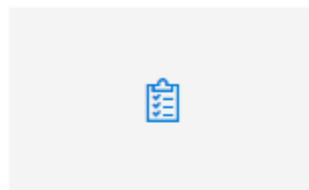
OneDrive | OneNote 集成



Interoperability Web Strategy



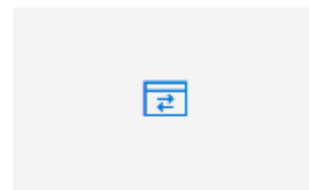
Web Platform Transparency



Status

Check out the status of web platform features and vote for the ones you need.

[BROWSE STATUS >](#)



Changelog

View differences between releases of Microsoft Edge and the EdgeHTML rendering engine.

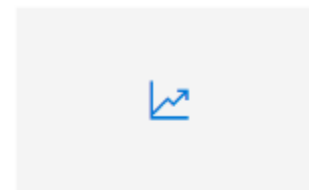
[SEE LATEST UPDATES >](#)



Issues

Found a rendering bug with a site? Tell us about it.

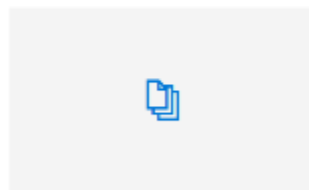
[BROWSE AND OPEN ISSUES >](#)



Data

Access the same data we use to plan the future of the web platform and use it to inform your own development.

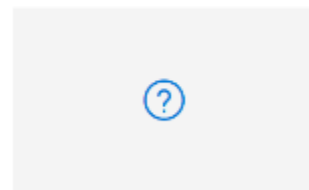
[EXPLORE DATA >](#)



Documentation

Documented web platform API features at MSDN.

[READ THE DOCS >](#)



FAQ

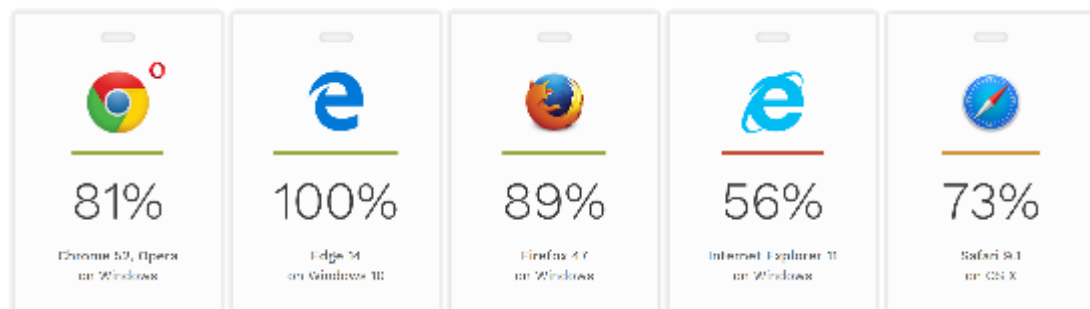
Find answers to some of the most commonly asked questions we get.

[GET ANSWERS >](#)

Information and tools on the Microsoft Edge Dev Center

持续优化的浏览器

HTML5 Accessibility



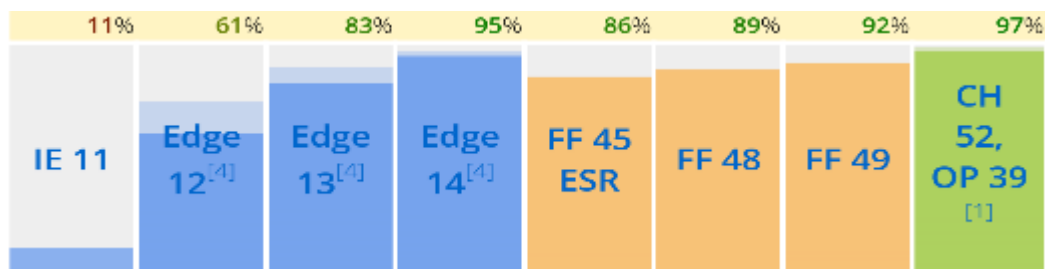
Source: HTML5Accessibility.com

Shared Browser APIs

	Google Chrome	Apple Safari
Internet Explorer 11	3963	3514
EdgeHTML 14	5889 (+49%)	4566 (+30%)

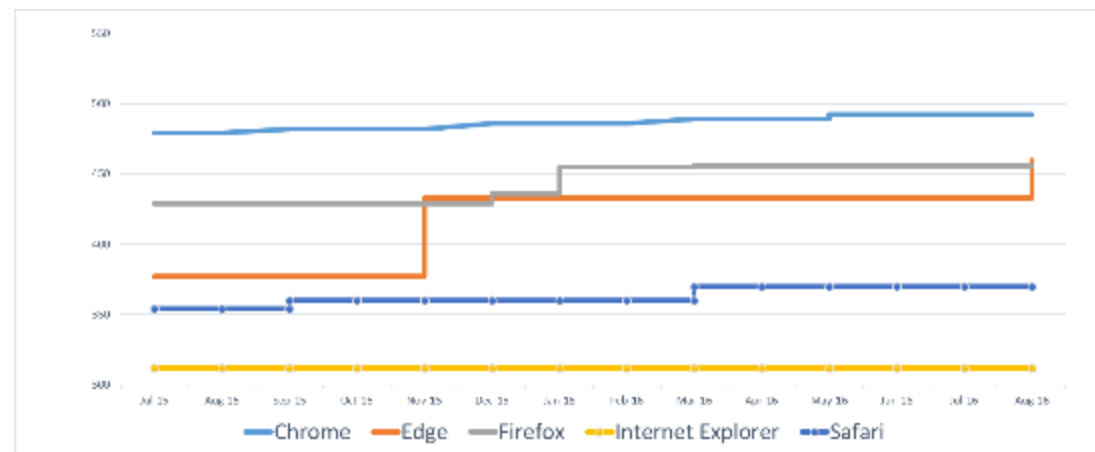
Source: <https://developer.microsoft.com/en-us/microsoft-edge/platform>

Kangax ECMAScript 6 Compatibility Table



Source: kangax.github.io

HTML5Test.com Scores Over Time



Source: HTML5Test.com

高性能的浏览器

44%

Faster Page Loads

88%

of the top sites
loaded faster

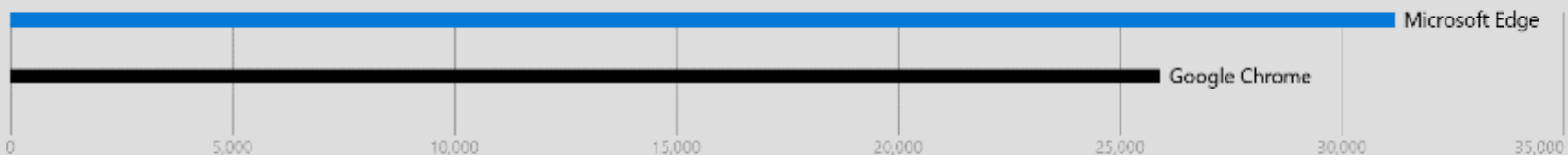
26%

Faster for
Common Tasks

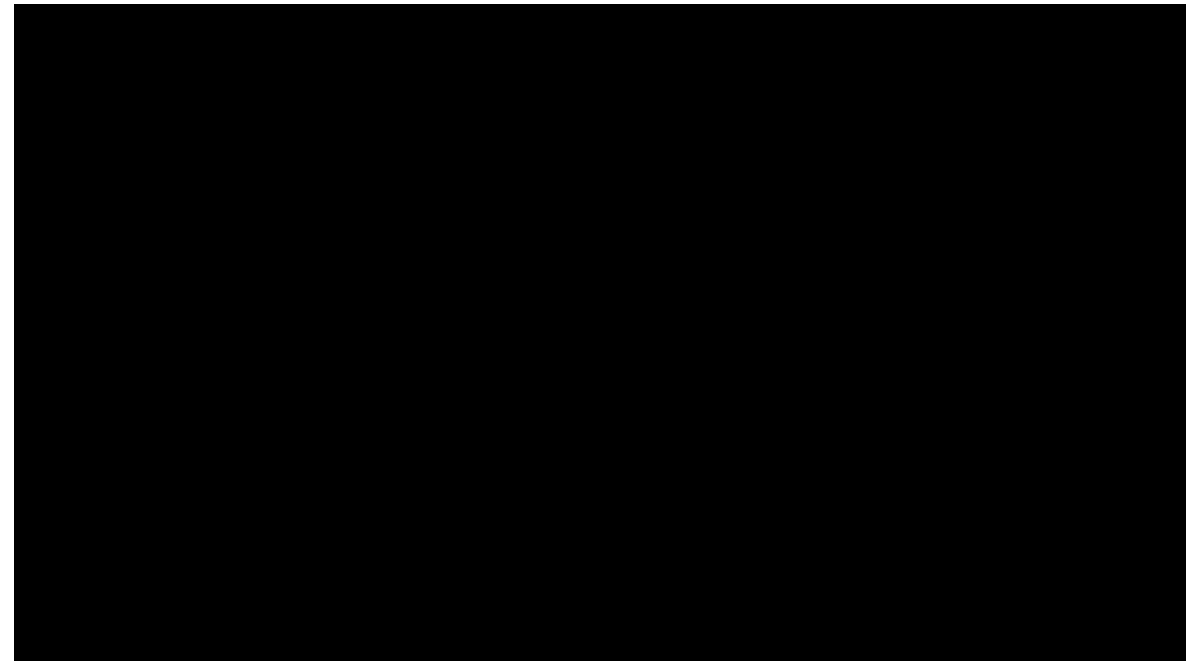
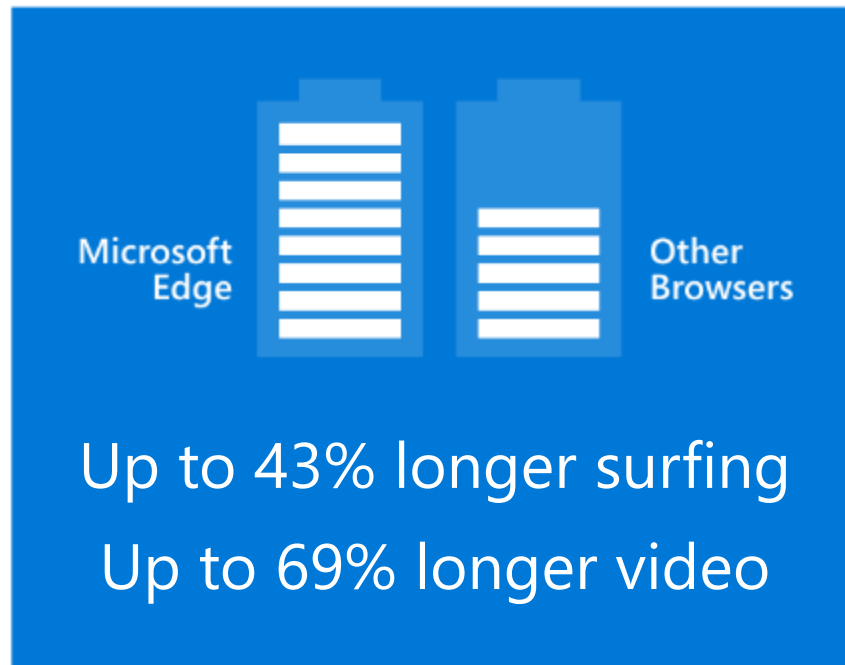
Google's own benchmark shows that Microsoft Edge is faster than Chrome

Google Octane 2.0

Higher numbers are better



高效省电的浏览器



Batteries last longer when surfing the web with Microsoft Edge

以人为本的浏览器



Make your mark on the web



Write, draw and take notes on web pages, then share your notes instantly

Web Note

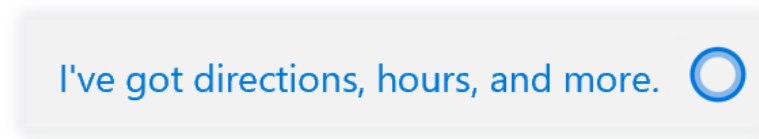
Ditch the distractions



Sweep distracting content away to focus on what's important

Reading view

Do more, faster



Get personalized browsing help from a true assistant

Cortana

关键因素	问题原因	解决方案
标准模式 Web standards docmode	网页在Edge模式下进行渲染错误，原因可能是该页面没有使用“<!DOCTYPE html>” 标签声明编写指令	  <p>请使用 HTML5 通用标签“<!DOCTYPE html>”声明编写指令，并删除IE兼容性标签“http-equiv”例如：“<meta http-equiv="x-ua-compatible" content="IE=*" > </meta>”</p>
框架和类库 Frameworks & libraries	网页是基于一些三方框架或类库进行搭建的，但是由于当前使用的版本过于陈旧， 从而出现一些问题	请您更新网站正在使用的框架和类库
浏览器前缀 CSS prefixes	网页正在使用浏览器前缀技术，以保证页面的跨平台体验效果，例如：-webkit- 和 -moz- 但是并不包含 -ms- 前缀	请您尝试将 -ms- 浏览器前缀与其他浏览器前缀同时加入CSS代码中，这样做不 会影响页面渲染和加载速度
浏览器检测 Browser detection	网页正在使用 userAgent 判断浏览器类型，进而选择性的展示功能	您只需将类似“navigator.userAgent;”的UA判断代码替换成功能检测代码 例如： modernizr
浏览器插件 Legacy plug-ins and features	网页正在使用Adobe Flash 和 PDF 以外的浏览器插件	建议您采用 无插件浏览体验 标准，页面将支持更多设备以及浏览器



Windows Edge 兼容性测试工具

<http://dev.modern.ie/tools/staticscan/>



详细修改建议和方案请参考

<http://aka.ms/edge-dev>



无插件的浏览体验



功能	基于插件的技术示例	基于标准的等效技术	详细信息
视频和音频	Flash、Apple QuickTime、Silverlight	HTML5 视频 和音频	视频、 音频
图形	Flash、Apple QuickTime、Silverlight、Java 小程序	HTML5 Canvas 、可缩放的向量图形 (SVG)、级联样式表级别 3 (CSS3) 过渡 和动画、CSS 转换、WebGL	Canvas、SVG、过渡、动画、转换、WebGL
脱机存储	Flash、Java 小程序和 Google Gears	Web 存储、文件 API、IndexedDB 和应用程序缓存 API	Web 存储、文件 API、IndexedDB 和应用程序缓存 API
网络通信、资源共享和文件上载	Flash 和 Java 小程序	HTML5 Web 消息传递和跨源资源共享 (CORS)	通道消息传递、XMLHttpRequest

Edge浏览器不支持出Adobe Reader和 Flash 以外的插件

框架与类库

- 尽量使用稳定并兼容度最高的框架

比如jQuery建议使用1.7.2版本

- 建议使用modern.IE的扫描功能

<http://dev.modern.ie/tools/staticscan/>



站点扫描

对任意 URL 执行快速代码扫描，找出过时的库、布局和辅助功能问题



试用我们的其他工具

dev.modern.ie



Microsoft Edge | Dev

I need help with

Web platform

Learn about Microsoft Edge

News & community

Connect with the team

Tools

Test and debug your site

Demos

Get inspired

Site scan

Run a quick code scan on any URL to check for out-of-date libraries, layout issues, and accessibility



Open source version available on GitHub. [Build date 02.27.2015] [Download here.](#)

Try our other tools



Virtual machines

Test Microsoft Edge and versions of IE6 through IE11 using free virtual machines you download and manage locally.



RemoteIE

Test remotely for free using Azure RemoteApp on your Windows, Mac, iOS or Android device.



Quick site scan

Run a quick code scan on any URL to check for out-of-date libraries, layout issues, and accessibility.



Generate screenshots

演示

www.qq.com在各浏览器展现效果



Azure App Service

Microsoft's solution for creating powerful web and mobile apps, fast.

The one of a kind cloud service that unifies everything you need to quickly and easily create enterprise grade apps that run on any platform or any device

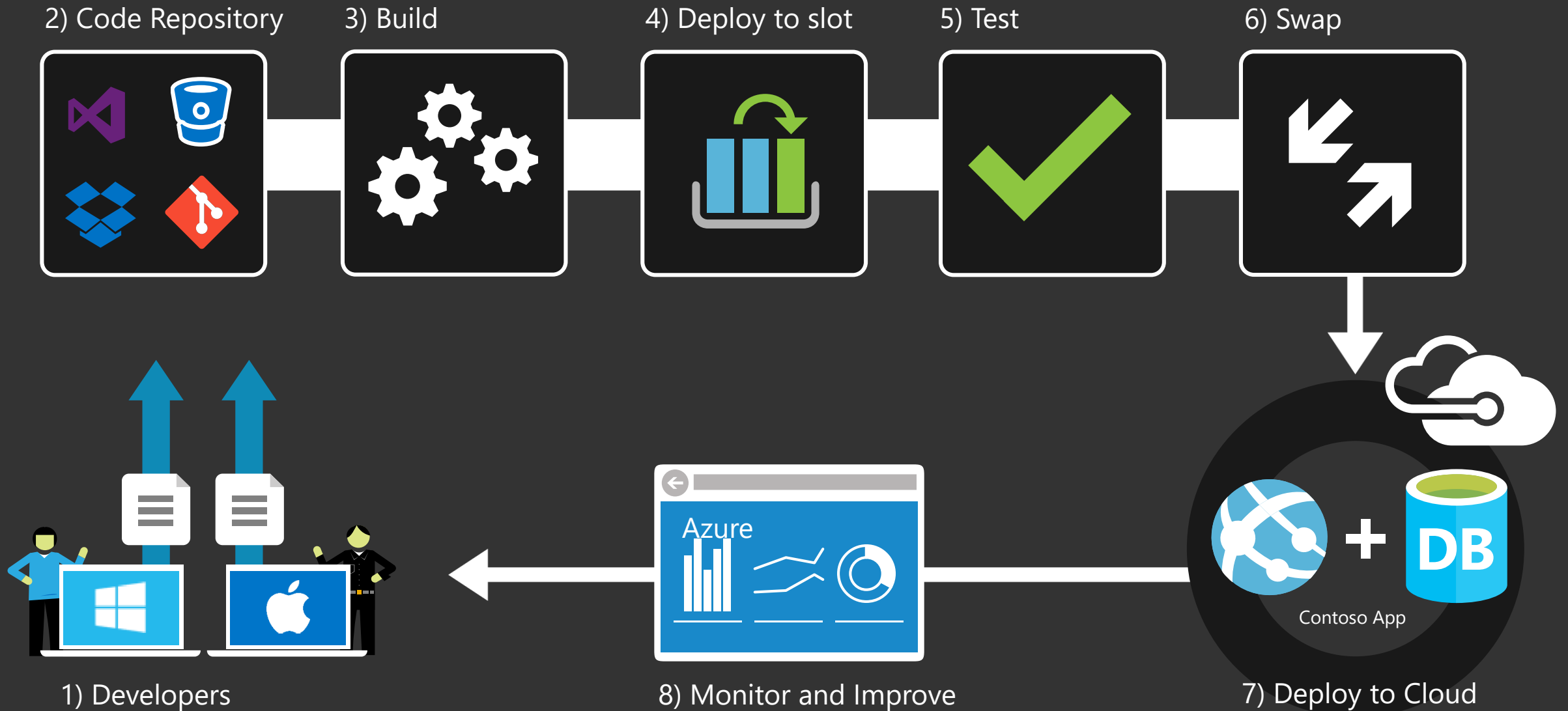
Enterprise
Grade Apps

Fully
Managed
Platform

High
Productivity
Development



Continuous Integration cycle



演示

How old are you?



1980s: PC

- 桌面系统



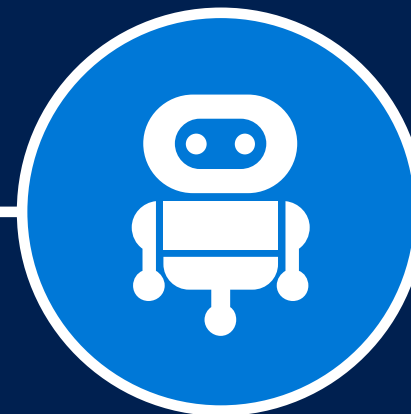
1990s: Internet

- 搜索
- 用户访问网页



2000s: Mobile

- 社交应用
- 用户从应用商店下载应用



The future:



- 人们通过自然语言去使用应用，服务，实现人机交互
- 对话的界面和体验
- Bots 和 Agents

Bots 给业务和用户粘度提供了新的机会和渠道:



随时随地、不受平台与设备限制地为
客户提供服务



以一种更自然的方式与用户进行交互：
在上下文语境中与用户会话



在用户量巨大的各种消息平台上开拓
您的应用与服务



提升用户体验，减少人工帮助的请求

Lilian Rincon, Yasmin Khan, Cortana, Silver Cup
5 members

@Silver Cup Flat White, please

Silver Cup 10:23 pm
I'll get that ready for you Lilian. Would anyone else like something?

Americano Flat White Iced Latte

10:23 pm
@Silver Cup Americano, please

Silver Cup 10:23 pm
I'll get that ready for you Gurdeep. Would anyone else like something?

Americano Flat White Iced Latte

Yasmin 10:23 pm
@Silver Cup Iced Latte, please

Silver Cup 10:23 pm
I'll get that ready for you Yasmin

Silver Cup 10:23 pm
Where should I deliver?

Send to my location Choose another place

10:23 pm
@Silver Cup Send to my location

Type a message here

HTML5 DREAMWORKS IT大咖说 不止于技术

Bot 框架



Bot 框架是一个 Microsoft-operated 服务
也是一个 SDK.

Bot 框架是微软提供编写bot机器人的众多
技术之一

其他技术: LUIS(语义理解), Speech APIs(语音识别技术), Azure, more

```
public Message Post([FromBody]Message message)
{
    if (message.Type == "Message")
    {
        // ...
        var convStatus = GetConversationStatus();
        switch (ConvStatus)
        {
            case OrderStatus.ShowSpecials:
                // ...
                break;
            case OrderStatus.GetAddress:
                // ...
                break;
        }
    }
}
```

Hey Pizza bot!

Hi Jeremy, the usual tonight?

No thanks, I'd like to try something new.

We have added 3 new items:

- 1) Hawaiian
- 2) BBQ Chicken
- 3) The Works

Option 3 please.

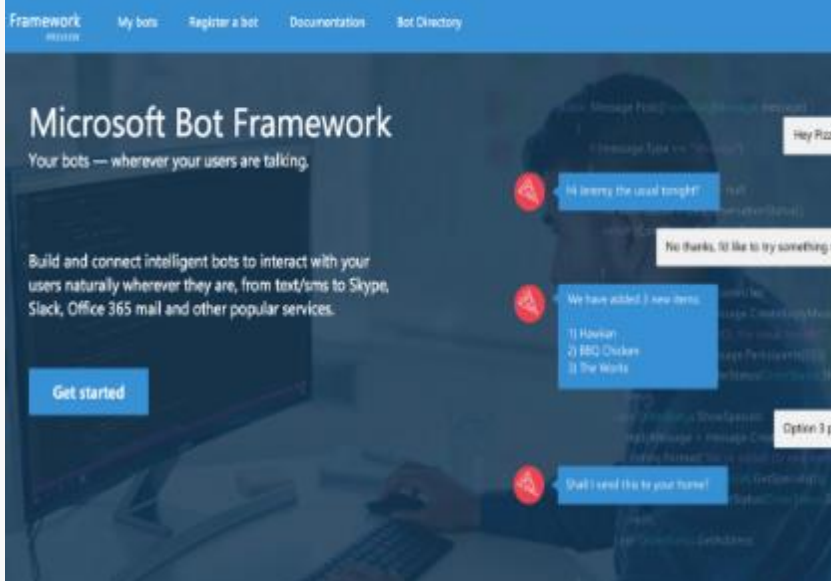
Shall I send this to your home?

Microsoft Bot 框架的组成部分



Bot Developer SDKs

Open source SDKs make it possible to bring your bot to life in minutes



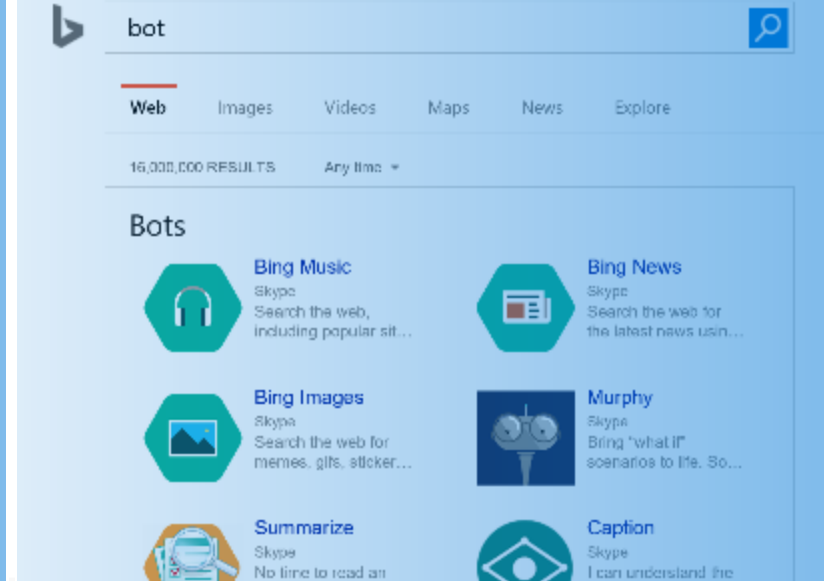
Bot Connector

Connect your bot to any or all of the top conversational experiences to reach >1B users

Channels	Test link	Status
Text/SMS	(206) 555-5555	Running
Facebook Messenger	@LibertySandwichBot	Running
Skype	@LibertySandwichBot	Running
Slack	@LibertySandwichBot	Running
Kik	@LibertySandwichBot	Running
Web chat		Running
Office 365 email		
GroupMe		
Telegram		
Direct line		

Bot Directory

Make your bot discoverable via Bing, Cortana and other Microsoft surfaces

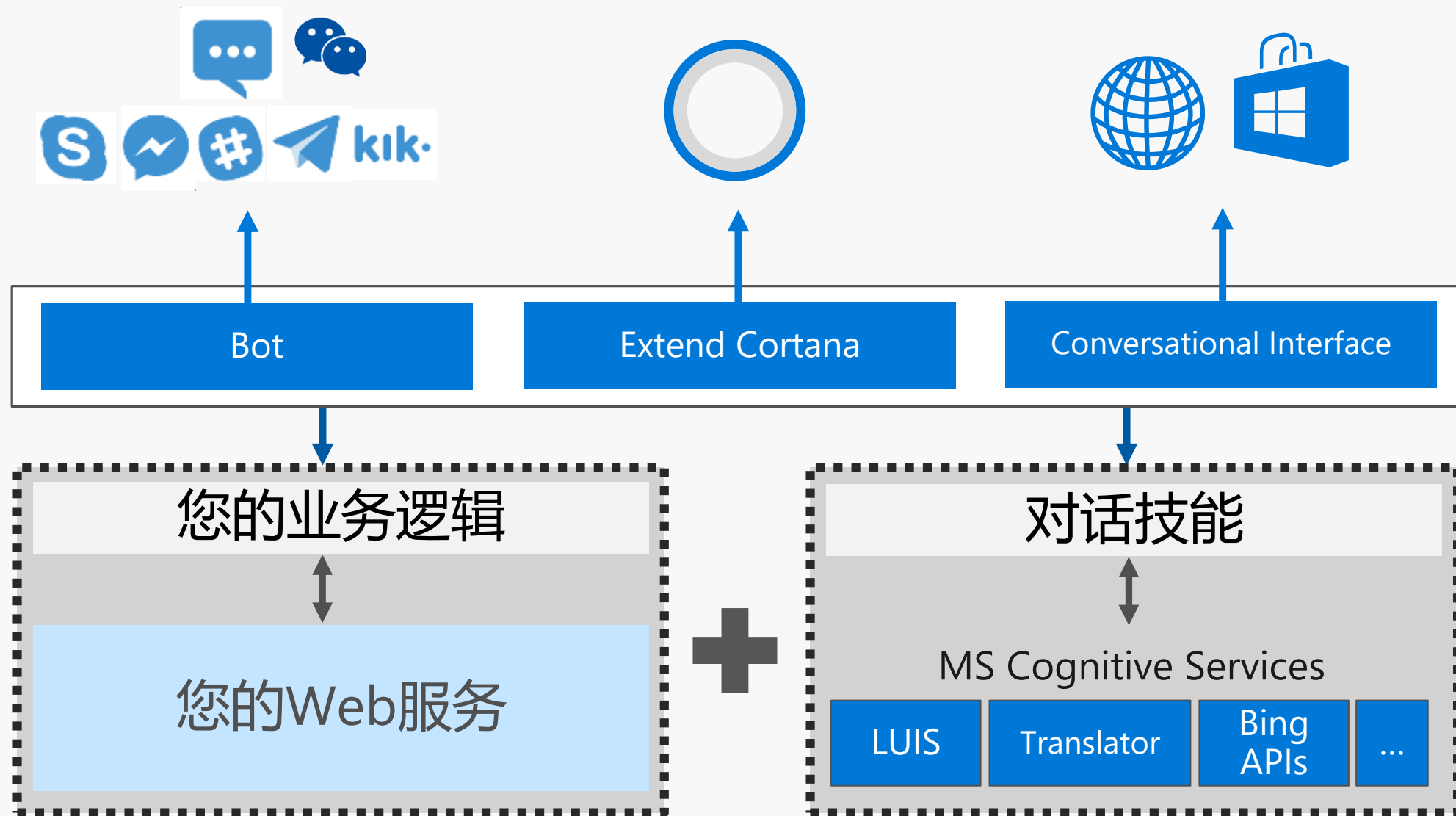


演示

微信企业号集成认知服务+BOT

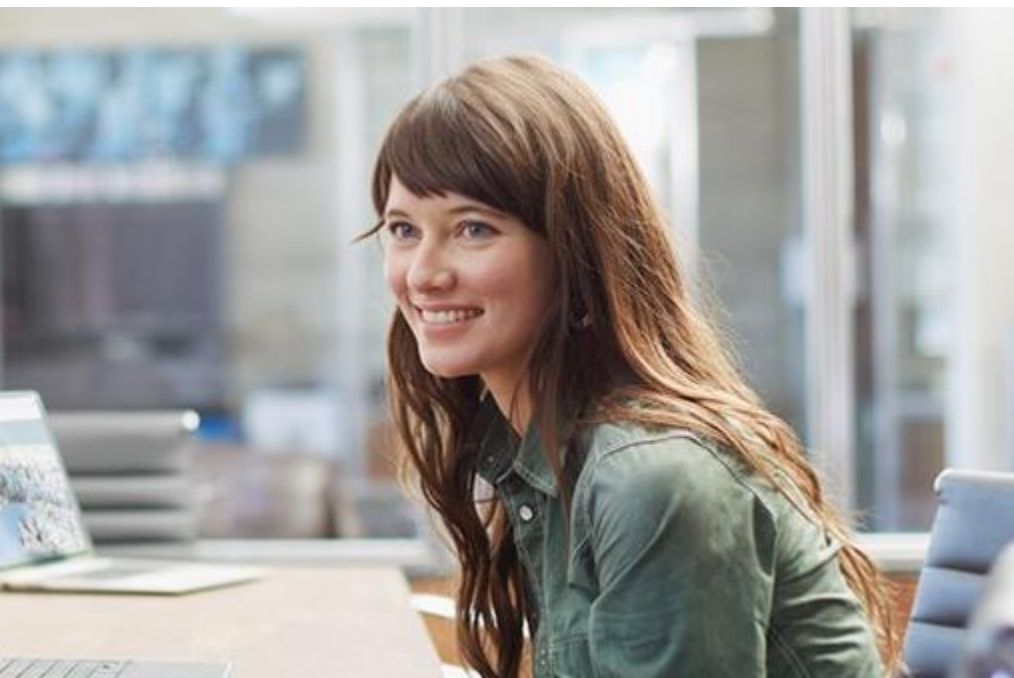
Skype集成认知服务+BOT

打造智能的对话体验



微软 认知服务

利用世界领先的人工智能技术，
让您的应用更具人性化



视觉

从面部感官到感觉，让您的对话机器人了解图像、
视频和情绪



语音

把语音转换为文本或把文本转换为语音；
了解您的意图，翻译语言，过滤噪音以及识别说话者



语言

教您的对话机器人理解自然语言指令，解析复杂的
文本以及了解用户情绪



知识

从网络、学术界或您自己的数据积累中融合丰富的
知识



搜索

通过必应API的强大功能访问数十亿网页、图片、
视频和新闻



微软赋能开发者实现智能方案



1



Publish anywhere using **Bot Framework**

2



Smarter bots with **Cognitive Services**

3



Solve complex problems with **Azure AI**

Trust and security

创新交互 智能体验

开发者



Edge

Fast, Productive
Tools



Azure

App Service
Continuous integration



BoT

Bot Framework
Bot directory



Cognitive
Service

Cognitive Services
Cortana Intelligence
Cognitive Toolkit

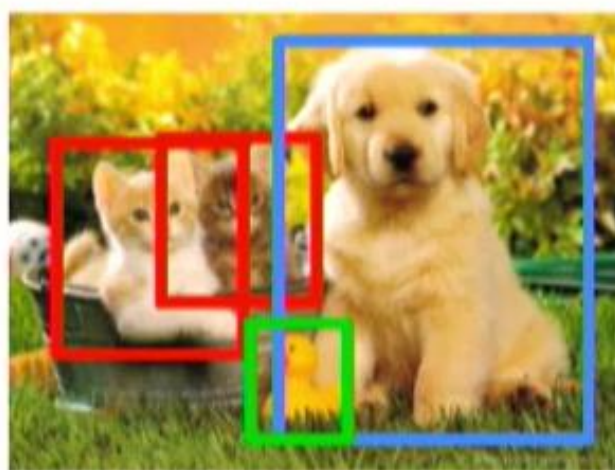
Computer vision tasks

Classification

Classification
+ Localization

Object Detection

Instance
Segmentation



CAT

CAT

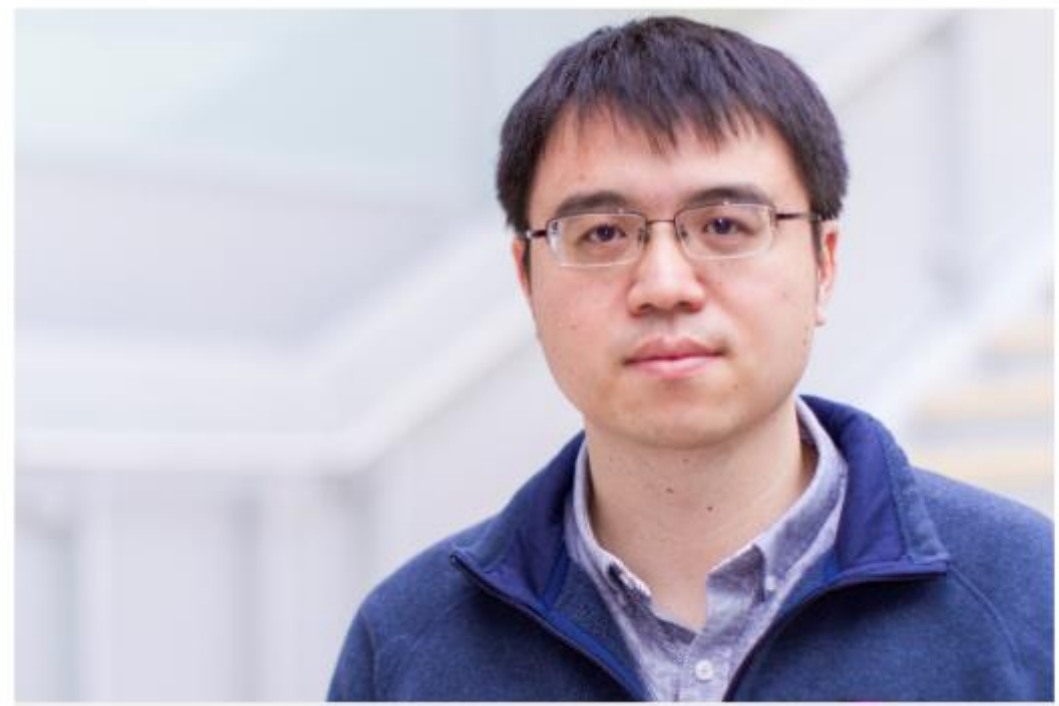
CAT, DOG, DUCK

CAT, DOG, DUCK

Single object

Multiple objects

Microsoft researchers win ImageNet computer vision challenge



Jian Sun, a principal research manager at Microsoft Research, led the image understanding project. Photo: Craig Tuschhoff/Microsoft.

Posted December 10, 2015 By Allison Linn

f 181 in 161 t

Featured Posts

-  Microsoft releases CNTK, its open source deep learning toolkit, on GitHub
-  Molecular biology meets computer science tools in new system for CRISPR
-  Microsoft researchers win ImageNet computer vision challenge

Popular Posts

-  How Microsoft and Novartis created Assess MS
-  Microsoft releases CNTK, its open source deep learning toolkit, on GitHub
-  Molecular biology meets computer science tools in new system for CRISPR

ImageNet Large Scale Visual Recognition Challenge (ILSVRC)



ImageNet Classification top-5 error (%)

