



# Bring Artificial Intelligence into iOS Apps with Microsoft Cognitive Services

Lori Lalonde  
Tech Evangelist  
@lolalond



# Microsoft Cognitive Services

Give your apps a human side



## Vision

From faces to feelings, allow your apps to understand images and video



## Speech

Hear and speak to your users by filtering noise, identifying speakers, and understanding intent



## Language

Process text and learn how to recognize what users want



## Knowledge

Tap into rich knowledge amassed from the web, academia, or your own data



## Search

Access billions of web pages, images, videos, and news with the power of Bing APIs



## Labs

An early look at emerging Cognitive Services technologies: discover, try and give feedback on new technologies before general availability

# Why Microsoft Cognitive Services?



## Easy

Roll your own with REST APIs

Simple to add: just a few lines of code required



## Flexible

Integrate into the language and platform of your choice

Breadth of offerings helps you find the right API for your app

Bring your own data for your custom experience



## Tested

Built by experts in their field from Microsoft Research, Bing, and Azure Machine Learning

Quality documentation, sample code, and community support



# Bringing it all together

## The Seeing AI App

Computer Vision, Image, Speech  
Recognition, NLP, and ML from  
Microsoft Cognitive Services

[Read blog here](#)

[Watch video here](#)





# Vision



## Computer Vision API

Distill actionable information from images



## Face API

Detect, identify, analyze, organize, and tag faces in photos



## Emotion API

Personalize experiences with emotion recognition



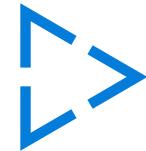
## Content Moderator

Machine-assisted moderation of text and images, augmented with human review tools



## Custom Vision Service

Customizable web service that learns to recognize specific content in imagery



## Video Indexer

Process and extract smart insights from videos



# Speech



## Bing Speech API

Convert speech to text and back again, and understand its intent



## Speaker Recognition API

Give your app the ability to know who's talking



## Custom Speech Service

Fine-tune speech recognition for anyone, anywhere



## Bing Spell Check API

Detect and correct spelling mistakes within your app



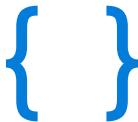
## Web Language Model API

Leverage the power of language models trained on web-scale data



## Linguistic Analysis API

Easily parse complex text with language analysis



## Language Understanding Intelligent Service

Teach your apps to understand commands from your users



## Text Analytics API

Detect sentiment, key phrases, topics, and language from your text



## Translator

Easily perform speech and text translation

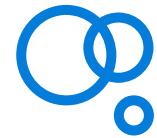


# Knowledge



## Academic Knowledge API

Explore relationships among academic papers, journals, and authors



## Knowledge Exploration Service

Add interactive search over structured data to your project



## Entity Linking Service

Contextually extend knowledge of people, locations, and events



## Recommendations API

Provide personalized product recommendations for your customers



## Custom Decision Service

Create custom experiences with adaptive, contextual decision-making



## QnA Maker

Distill information into conversational, easy-to-navigate answers

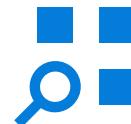


# Search



## Bing Web Search API

Connect powerful search to your apps



## Bing Image Search API

Bring advanced image and metadata search to your app



## Bing Video Search API

Trending videos, detailed metadata, and rich results



## Bing News Search API

Link your users to robust and timely news searches



## Bing Autosuggest API

Give your app intelligent autosuggest options for searches



## Bing Entity Search

Enrich user experiences with contextual entity search results



## Bing Custom Search

Create a highly-customized web search experience



# Microsoft Cognitive Services Labs

An early look at emerging Cognitive Services technologies:  
discover, try, and give feedback on new technologies before general availability



Project Prague  
Gesture based controls



Project Cuzco  
Event associated with Wikipedia



Project Johannesburg  
Route logistics



Project Nanjing  
Isochrones calculations



Project Abu Dhabi  
Distance matrices



Project Wollongong  
Score location attractiveness

# DEMO!

Let's take a look at  
the APIs in action

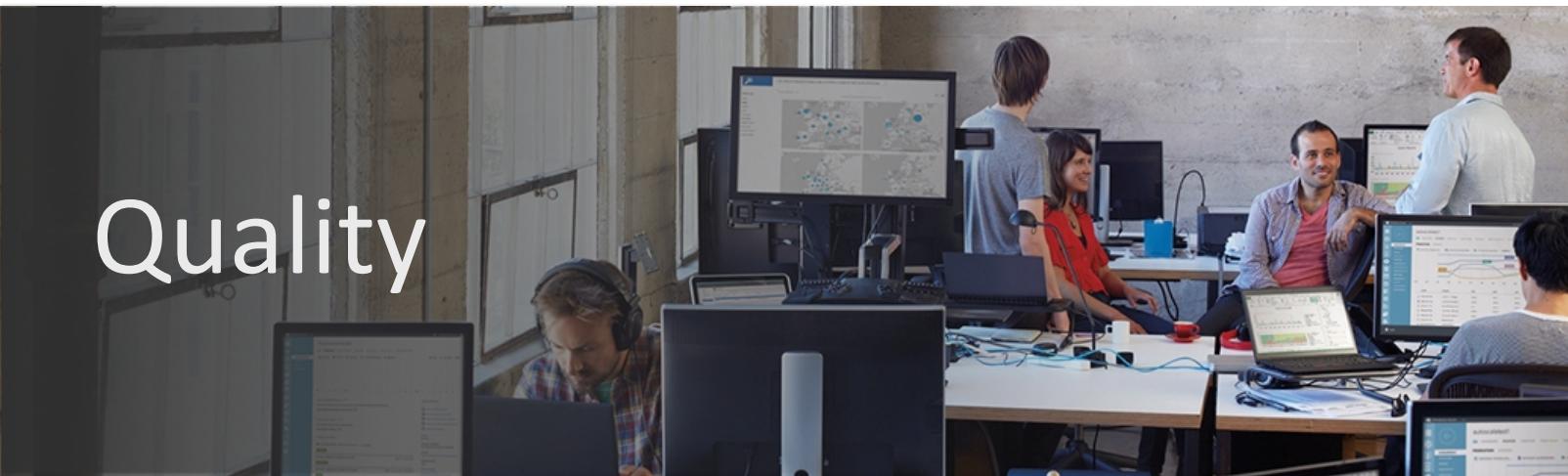


# Why Microsoft Cognitive Services?

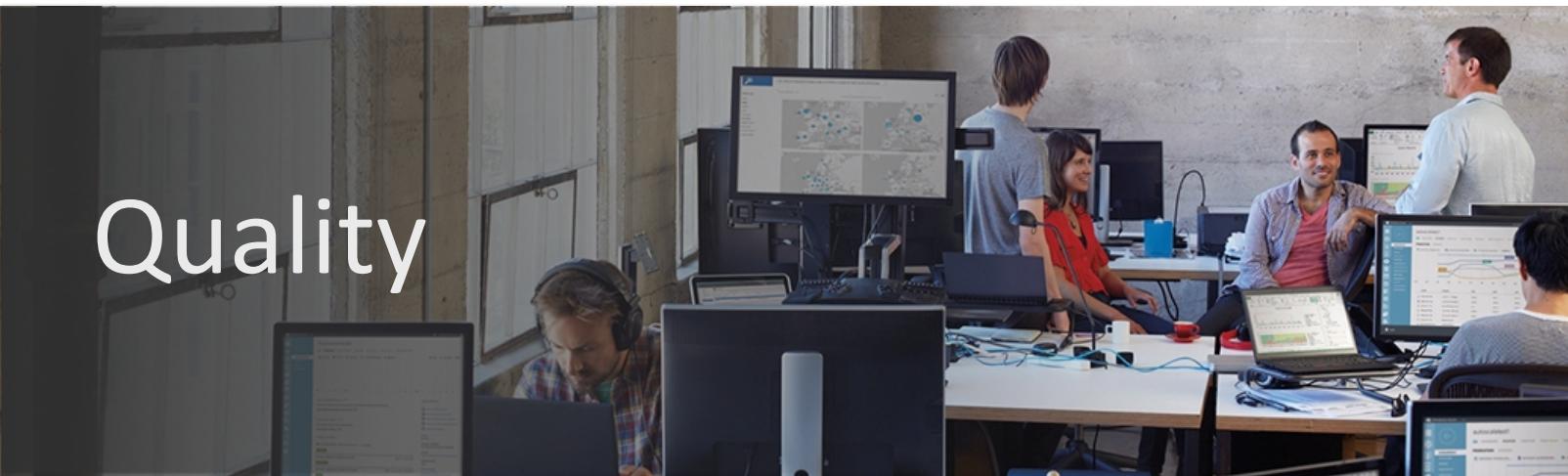
Easy



Flexible



Quality



# Developer resources

## Pricing

<https://azure.microsoft.com/en-us/pricing/details/cognitive-services/>

## Documentation

<https://docs.microsoft.com/en-us/azure/#pivot=products&panel=cognitive>

## Client SDKs

<https://azure.microsoft.com/en-us/resources/samples/?sort=0&term=cognitive+services>  
<https://github.com/southwood/project-oxford-python>

## Example Code

<https://github.com/jsturtevant/happy-image-tester-django>  
<https://github.com/Microsoft/Cognitive-Face-Android>  
<https://github.com/Microsoft/Cognitive-Samples-IntelligentKiosk>

## Join Our Community

<https://stackoverflow.com/questions/tagged/microsoft-cognitive>  
<https://cognitive.uservoice.com/>

Get started  
for free at  
[microsoft.com/cognitive](https://microsoft.com/cognitive)



