

Microsoft Cognitive Services

Democratizing intelligence

Ian Pike Technology Solution Professional Data & Al



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

Microsoft Cognitive Services Give your apps a human side



Exploration

Project Entity Linking

Microsoft Cognitive Services Give your apps a human side

Vision

Computer Vision Content Moderator

> Face Video Indexer

Speech Translator Speech Speech

> Speaker Recognition

Language

Bing Spell Check Translator Text Text Analytics Knowledge

QnA Maker

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Bing Autosuggest
Bing Image Search
Bing News Search
Bing Video Search
Bing Web Search
Bing Entity Search

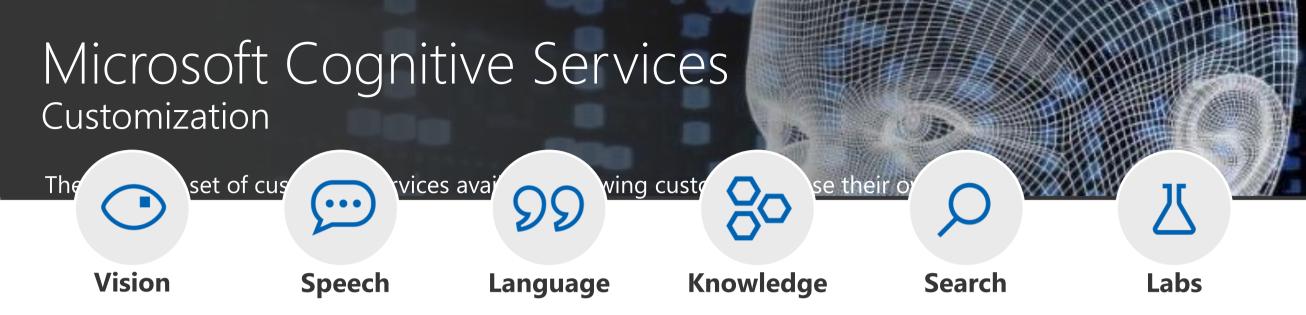
Search

Labs

Project Gesture Project Event Tracking Project Academic Knowledge Project Local Insights Project Knowledge Exploration Project Entity Linking

CUSTOMIZATION

Custom Vision Service Custom Speech Service Language Understanding Custom Decision Service Bing Custom Search



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Why Microsoft Cognitive Services?

Easy

Roll your own with REST APIs

Simple to add: just a few lines of code required



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

Flexible



Tested

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

Quality documentation, sample code, and community support

GitHub





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



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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



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Translator Speech API

Easily conduct real-time speech translation with a simple REST API call



Bing Speech API

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



Custom Speech Service

Fine-tune speech recognition for anyone, anywhere



Speaker Recognition API

Give your app the ability to know who's talking



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Language Understanding Intelligent Service

Teach your apps to understand commands from your users



Bing Spell Check API

Detect and correct spelling mistakes within your app

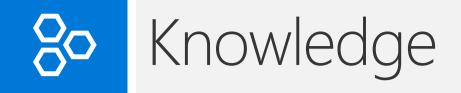
Text Analytics API

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



Translator Text API

Easily conduct machine translation with a simple REST API call





QnA Maker

Distill information into conversational, easy-to-navigate answers



Custom Decision Service

Create custom experiences with adaptive, contextual decision-making



Search

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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

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Bing Custom Search

Create a highly-customized web search experience

Microsoft Cognitive Services Labs

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Project Gesture

Incorporate gesture-based controls into your apps. Quickly define and implement customized hand gestures, creating a more natural user experience.



Project Event Tracking

Find events associated with Wikipedia entities. Begin with a Wikipedia entity, and receive a list of related events organized by time.



Project Academic Knowledge

Tap into the wealth of academic content in the Microsoft Academic Graph



Project Local Insights

Score the attractiveness of a location, based on how many of a particular amenity are within a specific distance.



Project Knowledge Exploration

Enable interactive search experiences over structured data via natural language inputs.



Project Entity Linking

Power your app's data links with named entity recognition and disambiguation

APIs in action

Intelligent Kiosk, JFK Files & QandA Maker Demos



Microsoft Cognitive Services Demo Links

Q & A Maker

https://gnamaker.ai/

Intelligent Kiosk

https://www.microsoft.com/store/productId/9NBLGGH5QD84

JFK Files

https://blogs.technet.microsoft.com/machinelearning/2017/1 1/15/gain-insights-into-the-jfk-files-with-azure-search-andcognitive-services/

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/enus/resources/samples/?sort=0&term=cognitive+services https://github.com/southwood/project-oxford-python

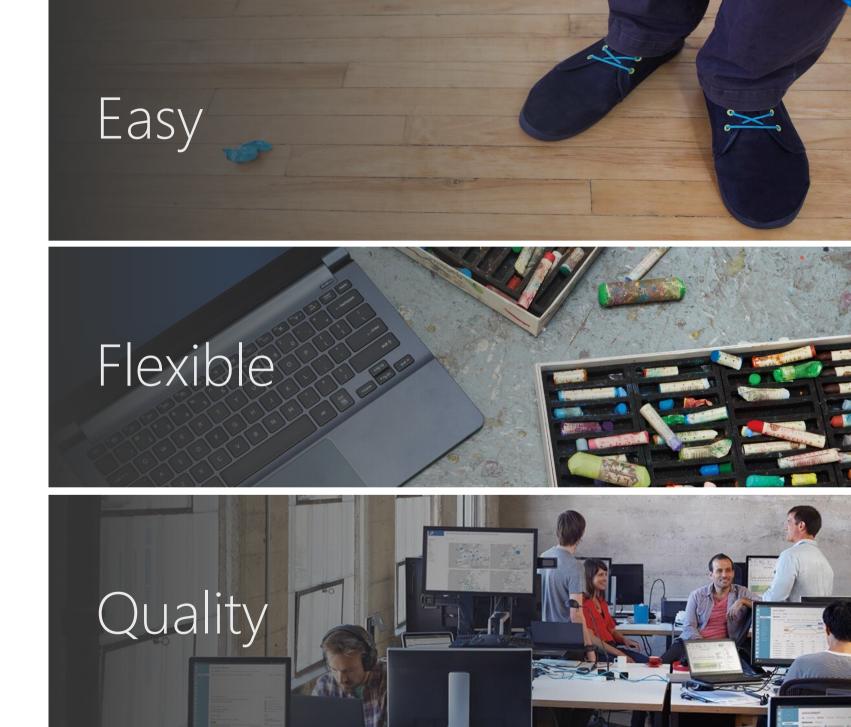
Example Code

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/

Why Microsoft Cognitive Services?



Get started for free at microsoft.com/Cognitive



