Microsoft
Cognitive Services
democratizing intelligence

Microsoft Cognitive Services

Give your apps
a human side

Cognitive Services API Collection

Vision
Computer Vision | Emotion | Face | Video

Speech
Computer Recognition | Speaker Recognition
Speech

Language
Bing Spell Check | Language Understanding
Linguistic Analysis | Text Analytics | Web Language
Model

Knowledge
Academic Knowledge | Entity Linking | Knowledge
Exploration | Recommendations

Search
Bing Autosuggest | Bing Image Search | Bing
News Search | Bing Video Search | Bing Web
Search

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

Tested

Built by experts in their field from Microsoft Research, Bing, and Azure Machine Learning
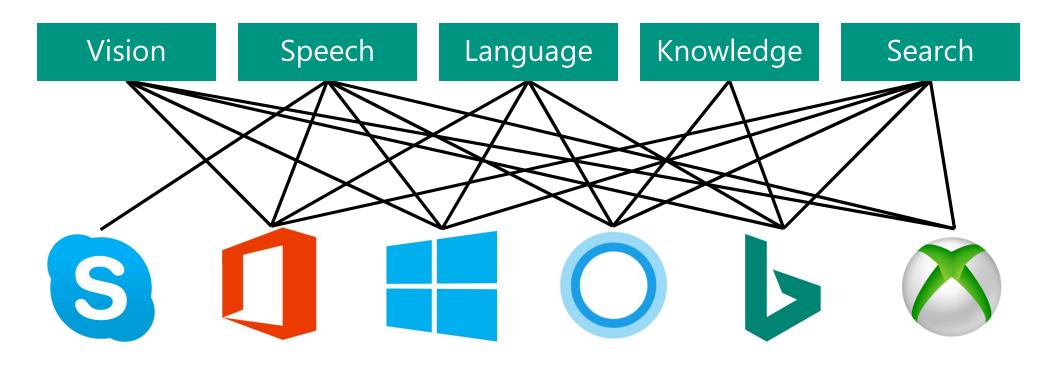
Quality documentation, sample code, and community support

Powering products across Microsoft

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

Video API

Analyze, edit, and process videos within your app

Computer Vision API

Computer Vision API

Computer Vision – celebrity detection
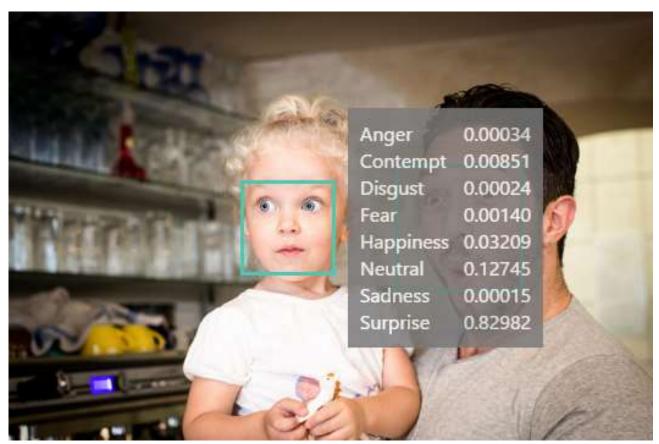
I think it's Satya Nadella, Bill Gates, Steve Ballmer standing next to a building and they seem 😄😄😄.

https://www.captionbot.ai

Emotion API

Anger	0.00034
Contempt	0.00851
Disgust	0.00024
Fear	0.00140
Happiness	0.03209
Neutral	0.12745
Sadness	0.00015
Surprise	0.82982

https://www.microsoft.com/cognitive-services/en-us/emotion-api

Face API

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 Recognition Intelligent Service

Fine-tune speech recognition for anyone, anywhere

Language

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

Language Understanding Intelligent Service

Understand what your users are saying
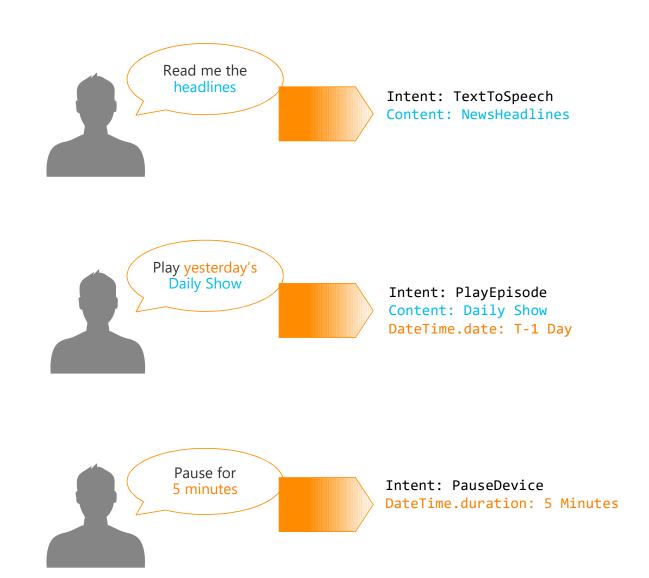- Determines intent
- Detects entities

Seamless integration with Speech Recognition

Learns over time

Use pre-built, world class models from Bing and Cortana

Read me the headlines

Intent: TextToSpeech
Content: NewsHeadlines

Play yesterday's Daily Show

Intent: PlayEpisode
Content: Daily Show
DateTime.date: T-1 Day

Pause for 5 minutes

Intent: PauseDevice
DateTime.duration: 5 Minutes

Example 1:

Language: ⓘ English (confidence: 100%)

Key phrases: ⓘ I had a wonderful experience! The rooms were wonderful and the staff were helpful.

Sentiment: ⓘ [98 %]

Example 2:

Language: ⓘ English (confidence: 100%)

Key phrases: ⓘ I had a terrible time at the hotel. The staff were rude and the food was awful.

Sentiment: ⓘ [1 %]

Example 3:

Language: ⓘ English (confidence: 100%)

Key phrases: ⓘ I had an okay stay at this hotel. The rooms were wonderful but the staff was rude.

Sentiment: ⓘ [25 %]

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

Highlight Content   JSON

Mars is the fourth planet from the Sun and the second smallest planet in the Solar System, after Mercury. Named after the Roman god of war, it is often referred to as the "Red Planet" because the iron oxide prevalent on its surface gives it a reddish appearance.

GO >

        }],
        "name":"De Graft",
        "wikipediaId":"Mercury (planet)",
        "score":0.999
    },
    {

        "matches":[{
            "text":"Roman god of war",
            "entries":[{
                "offset":122
            }]
        }],
        "name":"Mars",
        "wikipediaId":"Mars (mythology)",
        "score":0.007
    }]
}

Search

Bing Web Search API

Connect powerful search to your apps

Bing Autosuggest API

Give your app intelligent autosuggest options for searches

Bing Image Search API

Bring advanced image and metadata search to your app

Bing Video Search API

Trending videos, detailed metadata, and rich results
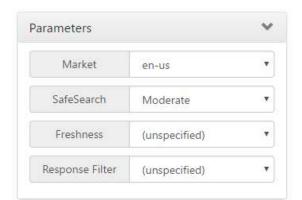
Bing News Search API

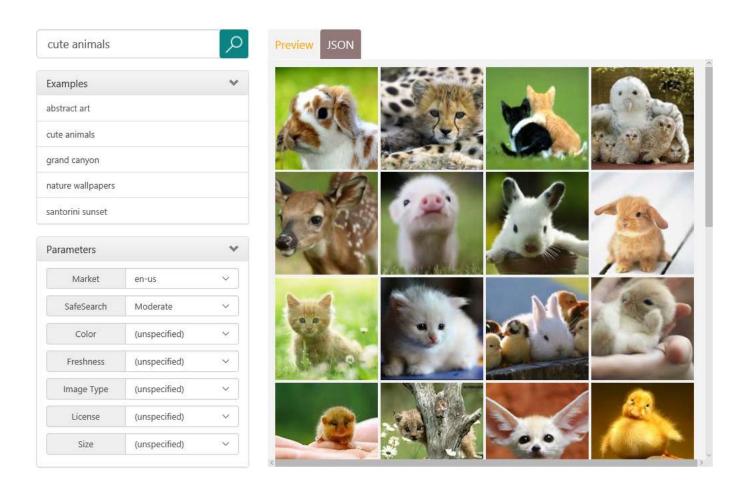Link your users to robust and timely news searches

easy recipes

🔍

Examples ⌄

burrito recipes

new movies

seattle seahawks

ted talks

weather today

Parameters ⌄

Market	en-us ▾
SafeSearch	Moderate ▾
Freshness	(unspecified) ▾
Response Filter	(unspecified) ▾

Preview JSON

```
{
  "_type": "SearchResponse",
  "webPages": {
    "webSearchUrl": "https://www.bing.com/cr?IG=BBBA5F1D16394191AA0628F8976270C6&CID=0ACB457A535
    "totalEstimatedMatches": 73500000,
    "value": [
      {
        "id": "https://bingapis.azure-api.net/api/v5/#WebPages.0",
        "name": "<b>Quick and Easy Recipes</b> - Allrecipes.com",
        "url": "http://www.bing.com/cr?IG=BBBA5F1D16394191AA0628F8976270C6&CID=0ACB457A535464802
        "displayUrl": "all<b>recipes</b>.com/<b>recipes</b>/1947/everyday-cooking/<b>quick-and-e
        "snippet": "Explore hundreds of top-rated <b>quick and easy recipes</b> for breakfast, ]
        "deepLinks": [
          {
            "name": "Quick and Easy Dinners",
            "url": "http://www.bing.com/cr?IG=BBBA5F1D16394191AA0628F8976270C6&CID=0ACB457A53546
            "snippet": "Looking for quick and easy dinner recipes? Allrecipes has more than 2,79
          },
          {
            "name": "Quick and Easy Desserts",
            "url": "http://www.bing.com/cr?IG=BBBA5F1D16394191AA0628F8976270C6&CID=0ACB457A53546
            "snippet": "Easy homemade pies, cookies, cake, and more. Treat yourself with no-bake
          }
        ],
        "dateLastCrawled": "2016-04-25T11:45:00"
      },
      {
        "id": "https://bingapis.azure-api.net/api/v5/#WebPages.1",
        "name": "<b>Easy Recipes</b> - Kraft <b>Recipes</b>",
        "url": "http://www.bing.com/cr?IG=BBBA5F1D16394191AA0628F8976270C6&CID=0ACB457A535464802
        "displayUrl": "www.kraft<b>recipes</b>.com/<b>recipes</b>/dinner/<b>easy-recipes</b>/mai
        "snippet": "Discover <b>easy recipes</b> for chicken, pasta and desserts from Kraft <b>F
        "dateLastCrawled": "2016-04-25T04:55:00"
      },
```

Image Search API

Chicago

Preview   JSON
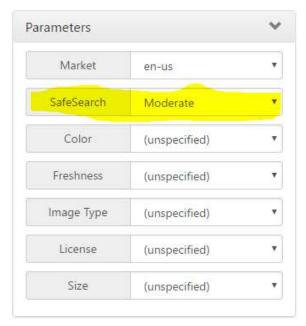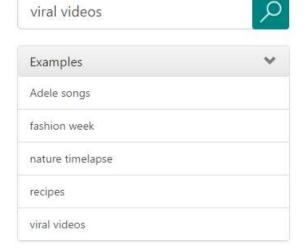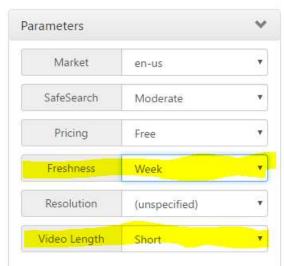
Examples

abstract art

cute animals

grand canyon

nature wallpapers

santorini sunset

Parameters

Market	en-us ▼
SafeSearch	Moderate ▼
Color	(unspecified) ▼
Freshness	(unspecified) ▼
Image Type	(unspecified) ▼
License	(unspecified) ▼
Size	(unspecified) ▼

viral videos 🔍

Preview   JSON

Examples ⌄

Adele songs

fashion week

nature timelapse

recipes

viral videos

Parameters ⌄

Market	en-us ▾
SafeSearch	Moderate ▾
Pricing	Free ▾
Freshness	Week ▾
Resolution	(unspecified) ▾
Video Length	Short ▾

Dog Must Not Eat The Biscuits!

Viral Videos #1   XEROCOOLER

Imran Khan words looses their respect & tarnish his image

...y member in PTI is a leader

Whatsapp Funny & **Viral Videos** 2016 Best Of All Time Whatsapp

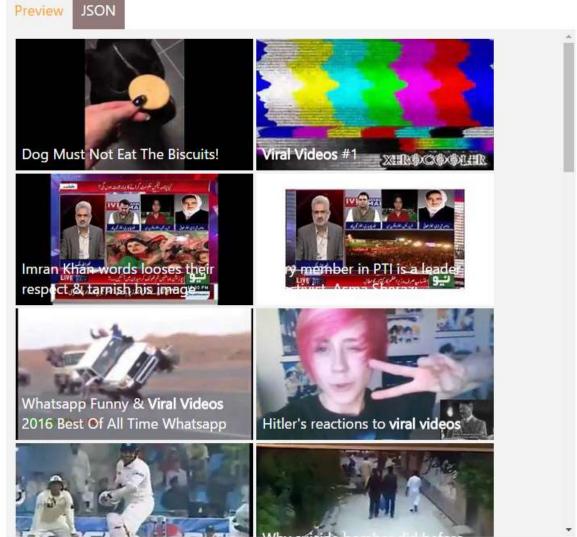Hitler's reactions to **viral videos**

Developer Resources

Preview Pricing

https://www.microsoft.com/cognitive-services/en-us/pricing

Documentation

https://www.microsoft.com/cognitive-services/en-us/computer-vision-api/documentation

Client SDKs

https://github.com/Microsoft/ProjectOxford-ClientSDK

https://github.com/felixrieseberg/project-oxford (nodejs)

https://github.com/southwood/project-oxford-python

Example Code

https://github.com/jsturtevant/happy-image-tester-django

https://github.com/jsturtevant/happy-image-tester-nodejs

Join Our Community

https://stackoverflow.com/questions/tagged/microsoft-cognitive

https://social.msdn.microsoft.com/forums/azure/en-US/home?forum=mlapi

https://cognitive.uservoice.com/

Why Microsoft
Cognitive Services?

Easy

Flexible

Quality

Get started for free at
microsoft.com/Cognitive