



# Integrating Machine Learning into Modern Web App using Cognitive Services

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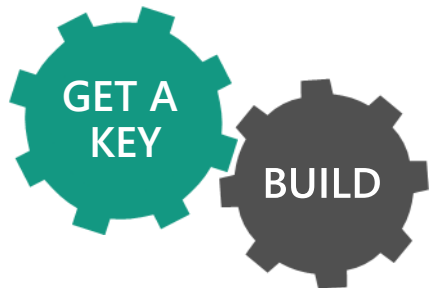
# Microsoft Cognitive Services *democratizing intelligence*



# 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





# 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

# Microsoft Cognitive Services

Give your apps  
a human side

## Cognitive Services API Collection



### Vision

Computer Vision | Emotion | Face | Video



### Speech

Bing Speech | Custom Recognition | Speaker Recognition



### Language

Bing Spell Check | Language Understanding  
Linguistic Analysis | Text Analytics | Translator |  
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



# Bringing it all together

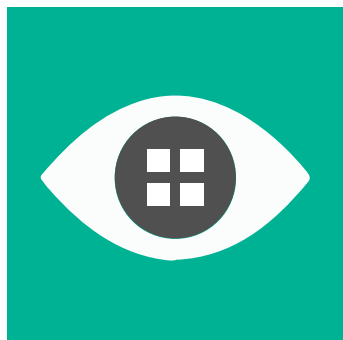
The Seeing AI App

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

[Read Blog Here](#)

[Watch Video Here](#)

# Vision



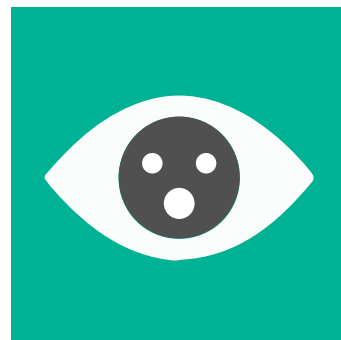
## Computer Vision API

Distill actionable information from images



## Face API

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



## Emotion API

Personalize experiences with emotion recognition



## Video API

Analyze, edit, and process videos within your app



# 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



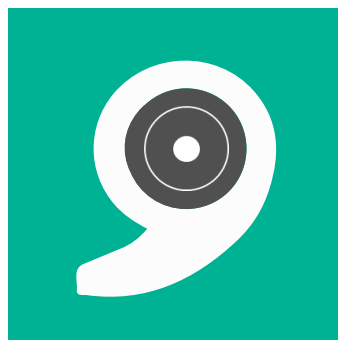
## Bing Spell Check API

Detect and correct spelling mistakes within your app



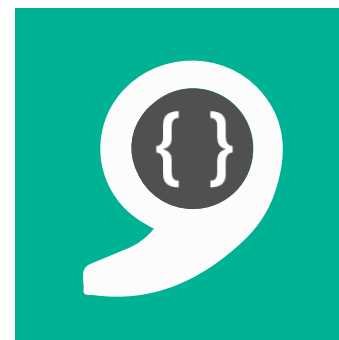
## Web Language Model API

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

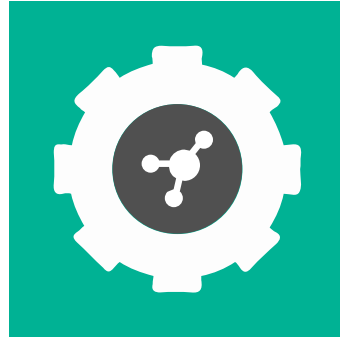


# Knowledge



## 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



# 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

APIs in action





# 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?

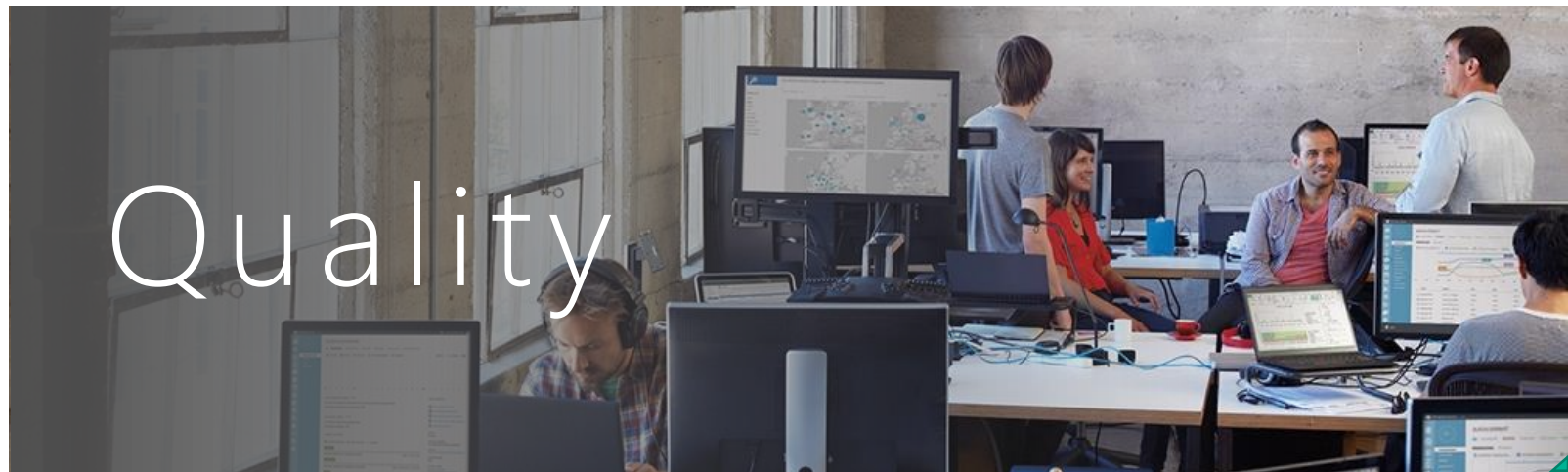
Easy



Flexible



Quality





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



Q&A



