Deliver New Customer Experiences through Azure Cognitive Services

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Why Microsoft Cognitive Services?

Easy

Flexible

Quality
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**
Map complex information and data in order to solve specific tasks

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

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

- **Computer Vision**: Distill actionable information from images
- **Video Indexer**: Process and extract smart insights from videos
- **Face**: Detect, identify, analyze, organize, tag faces in photos, and even recognize emotions
- **Content Moderator**: Machine-assisted moderation of text and images, augmented with human review tools
- **Custom Vision**: Customizable web service that learns to recognize specific content in imagery
**Speech**

**Speaker Recognition**
Use speech to identify and verify individual speakers

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

**Custom Speech**
Overcome speech recognition barriers like speaking style, background noise, and vocabulary

**Unified Speech service**
Unified speech service for speech-to-text (general and custom speech models), text-to-speech (general and custom voice models) and speech translation (general and custom translator)

**Bing Speech**
Convert speech to text and back again to understand user intent
Text Analytics
Detect sentiment, key phrases, language, and extract top entities from your text

Bing Spell Check
Detect and correct spelling mistakes within your app

Translator Text
Easily perform speech and text translation

Language Understanding
Teach your apps to understand commands from your users
QnA Maker
Distill information into conversational, easy-to-navigate answers
Search

- **Bing Search**: Web Search, Image Search, News Search, Video Search
- **Bing Visual Search**: Get rich insights to help build compelling image applications on the device of your choice
- **Bing Entity Search**: Enrich user experiences with contextual entity search results
- **Bing Autosuggest**: Give your app intelligent autosuggest options for searches
- **Bing Custom Search**: Create a highly-customized web search experience

**Bing Statistics add-in**: Get powerful Bing API usage insights in an easy-to-use add-in
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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 Ink Analysis**
Cloud APIs to understand digital ink content created by users through document layout analysis and handwriting and shape recognition.

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

**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 Answer Search**
Enhance the user experience of your sites and applications by instantly answering search queries with relevant facts and results from across the web.

**Project URL Preview**
Preview URLs to show users where they’re going and help flag adult content.
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Project Conversation Learner
Teach new behaviors to task-oriented conversational interfaces through example interactions

Project Personality Chat
Enhance your bot's conversational capabilities, by handling small talk, in line with a distinct chosen personality

Project Knowledge Exploration
Enable interactive search experiences over structured data via natural language inputs

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

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

Project Anomaly Finder
The Anomaly Finder API helps you to monitor data over time and detect anomalies with machine learning that adapts to your unique data by automatically applying a statistical model
Mendix
Cognitive services in practice
The App: Emergency response dispatch

Screenshot pending (have to finish demo app)
The Service: Azure Custom Vision

<table>
<thead>
<tr>
<th>Tag</th>
<th>Probability</th>
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<tbody>
<tr>
<td>Cat in tree</td>
<td>99.9%</td>
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<tr>
<td>Cat</td>
<td>72%</td>
</tr>
<tr>
<td>Tree</td>
<td>18%</td>
</tr>
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</table>
Consuming and Reusing Azure Custom Vision

- Native REST support
- Custom, reusable connector
- Visual modeling of required business capabilities
- Mobile device support
Questions?