FUTURE DECODED

6-7 OTT '16 / MILANO

IN PARTNERSHIP WITH: CommunityDays.it

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Visione artificiale con Cognitive Services, IoT e Azure

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Microsoft Most Valuable Professional

DotNet Toscana

Microsoft Cognitive Services

Give your apps a human side

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Cognitive Services

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

Why Microsoft Cognitive Services ?

Easy

Roll your own with REST APIs

Simple to add: just a few lines of code required

Flexible

Make the same API code call on iOS, Android, and Windows

Integrate into the language and platform of your choice

Tested

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

Quality documentation, sample code, and community support

python™ node.js™

GitHub msdn uservoice stackoverflow

Cognitive Services

microsoft.com/cognitive

Vision	Speech	Language	Knowledge	Search
Computer Vision	Custom Recognition	Bing Spell Check	Academic Knowledge	Bing Web Search
Emotion	Speaker Recognition	Linguistic Analysis	Entity Linking	Bing Image Search
Face	Speech	Language Understanding	Knowledge Exploration	Bing Video Search
Video	Translator	Text Analytics	Recommendations	Bing News Search
		WebLM		Bing Autosuggest

The See4Me project

- Build for vision impaired people
- An application for «seeing» the world
- Use Vision, Emotion e Bing Translator services to describe pictures, people emotion and read it in the user local language
- «Point and Click»

Project Description

- Open-Source on GitHub
- App cross-platform with Xamarin
  - Windows, Android, iOS
- But also cross-experience
  - Run also on Windows 10 IoT Core

How it works

DEMO

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Windows 10 IoT: some pretty cool IoT devices

Device Options

www.windowsondevices.com

Windows 10 IoT Core Development Devices

Windows 10 IoT Core works with several leading SoCs that are utilized in hundreds of devices. Below you can find suggested devices to get started quickly, additional devices that provide more silicon and form factor choices, as well as community devices that have been enabled independt of Microsoft involvement.

Suggested Devices

Show/Hide

Additional Devices

Show/Hide

Community Devices

Show/Hide

- Raspberry Pi 2 Starter Pack
- Raspberry Pi 2
- Raspberry Pi 3
- Dragonboard 410c
- Intel Joule
- Minnowboard Max

The Windows 10 IoT Core version

Raspberry Pi 3

Intel Joule

Push Button

LifeCam HD-3000

Auricolari

How it works

The «Cognitive Helmet»

DEMO

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See4Me is one of the official SDK sample

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

Sample | Face, Emotion, Computer Vision

See4Me

By Community

A cross-platform app to 'see' the world. Simply point the smartphone and tap: in a few instants the app will describe and speak what it sees -- from scenes to objects to

View source code

Future evolution

- Text recognition from Picture
  - Es: restaurant menu
- People identification
- Use position to integrate Social network and give more accurate info
  - Using Azure services

- HoloLens version
  - Working on it ☺

Question?

Slide on

http://www.communitydays.it/

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Reference

- https://www.microsoft.com/cognitive-services
- https://www.microsoft.com/cognitive-services/en-us/SDK-Sample
- https://github.com/DotNetToscana/See4Me
- https://cognitive.uservoice.com
- Subscribe service
  - https://www.microsoft.com/cognitive-services/en-us/sign-up
  - SDK available on NuGet (Microsoft.ProjectOxford.*)
- Bing Translator
  - https://datamarket.azure.com/dataset/bing/microsofttranslator
  - https://datamarket.azure.com/developer/applications
- Windows 10 IoT Core
  - https://www.windowsondevices.com

Thanks

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