Microsoft

Innovation Center Belgique

MICBELGIQUE

AN INITIATIVE OF

Microsoft

Wallonie

PART OF

digital wallonia .be

Prototyping

Prototypage rapide de projets avec des **partenaires locaux et des stagiaires**.

Coaching

Coaching business et technique pour les **entrepreneurs, startups et PME** dans le domaine de l'IT.

Networking

Événements communautaires et rencontres **pour les développeurs enthousiastes et startupeurs**.

Training

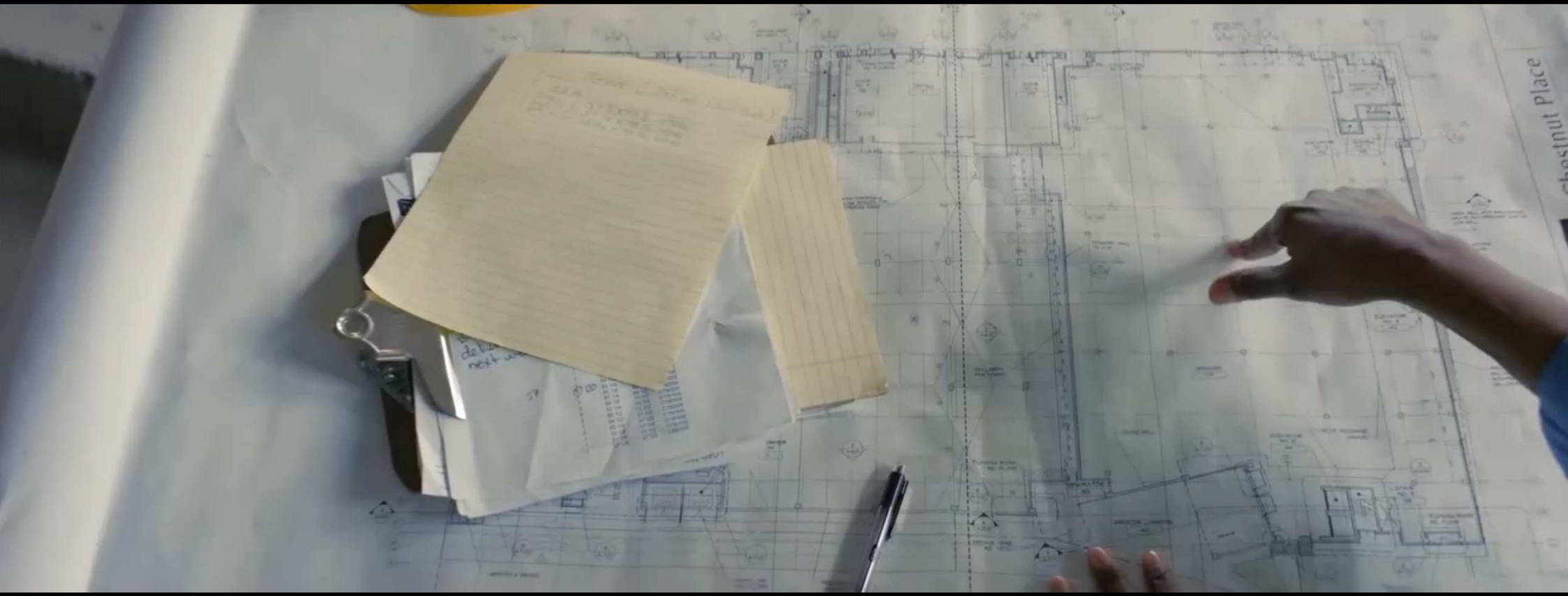
Initiation aux nouvelles technologies **pour les étudiants et les professionnels**.

A Vision

for Mixed Reality applications

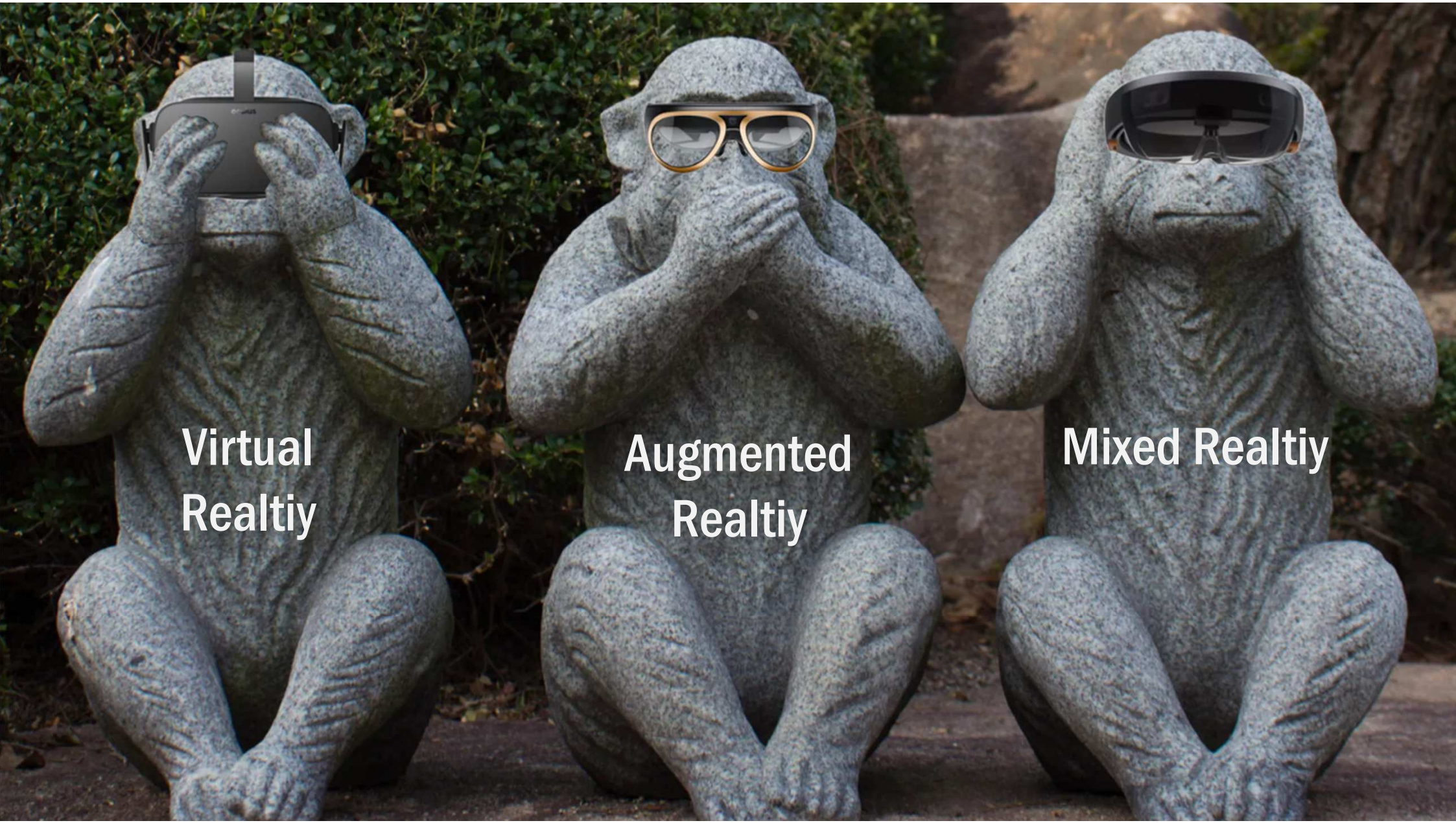
Bringing the idea to life,

Microsoft HoloLens is the first fully self-contained, holographic computer, enabling you to interact with high-definition holograms in your world.


Chestnut Place

Holograms ?

- A hologram is made entirely of light.
- Holographic objects can be viewed from different angles and distances, just like physical objects.
- Hologram do not offer any physical resistance when touched or pushed because they don’t have any mass.


Virtual
Realtiy
Augmented
Realtiy
Mixed Realtiy

Recipes
Vacation
To-Do List
Ticket
Sun screen
Beach towel
Sunglasses
Charger
Maui
Mon
Tue
Wed
71°F
74°F
76°F

169.254.4.128/3dview.htm

Microsoft HoloLens

3D View

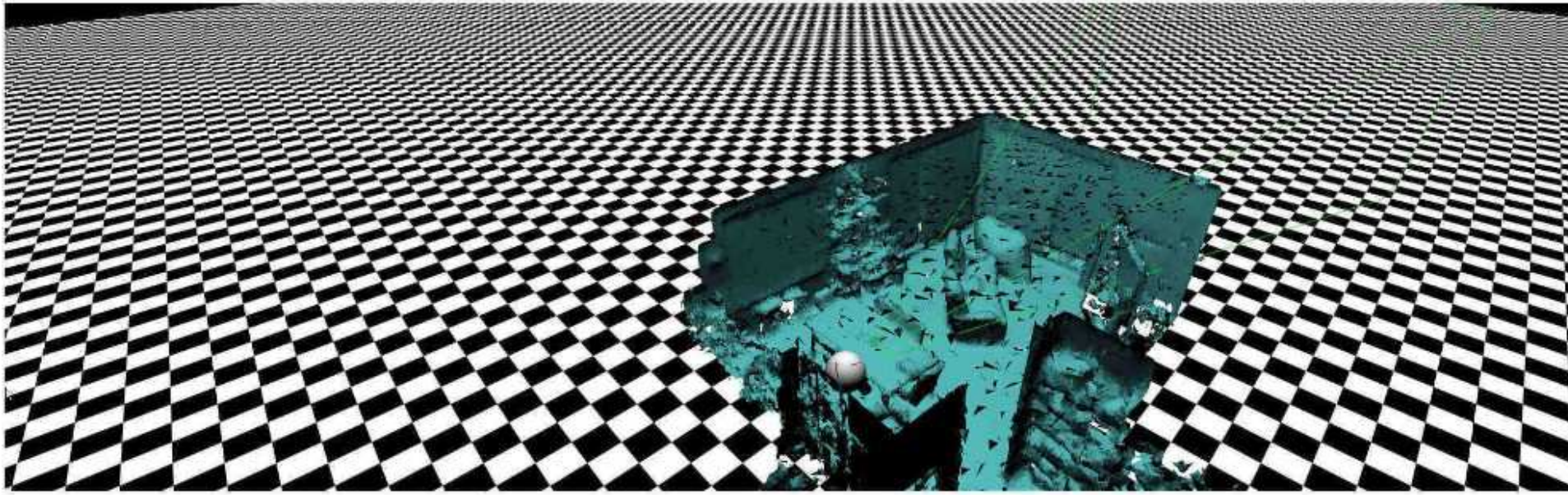
ONLINE | SHUTDOWN | RESTART | SECURITY | COOL

VIEWS
- Home
- 3D View
- Mixed Reality Capture

PERFORMANCE
- Performance Tracing
- Processes
- System Performance

SYSTEM
- Apps
- App Crash Dumps
- Kiosk Mode
- Logging
- Simulation
- Networking
- Virtual Input

Tracking: active



Rotate: left click + mouse; Pan: right click + mouse; Zoom: mouse scroll

Tracking options

- ☐ Force visual tracking
- ☐ Pause

View options

- ☑ Show floor
- ☑ Show frustum
- ☐ Show stabilization plane
- ☑ Show mesh
- ☐ Show details

Full screen

Surface reconstruction

Update

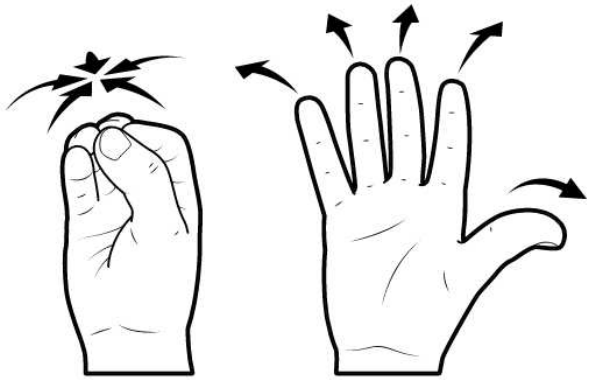
Save

32 volumes; 107662 triangles

Sensor fusion

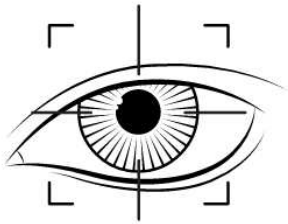
Advanced sensors capture information about what you're doing and the environment you’re in.
Microsoft HoloLens can see, map, and understand the physical places, spaces, and things around you.

Interface



Gestures
Engineers are fine-tuning a feature called “holding” that would allow you to grasp and manipulate holographic objects. Opening your hand would take you back to a home screen.

Voice
Microphones in the device capture voice commands.



Gaze
Sensors track where the wearer is looking and adjust the display.

The source code is yours.

You shared your ideas. Now, Galaxy Explorer Project is ready and you can get the source code. If you have a device, Galaxy Explorer Project is also available for download from Windows Store on Microsoft HoloLens.

Windows Holographic ?

Mixed Reality |

Dad

Microsoft Windows Holographic
with Hololens

Microsoft Cognitive Services
to put intelligence to your apps

Microsoft Bot Framework
to build great conversationlist

Microsoft

Cognitive Services

Vision

Computer Vision API

Preview

Distill actionable information from images

Content Moderator

Preview

Automatically moderate text, images, and videos, augmented with human review tools.

Emotion API

Preview

Personalize experiences with emotion recognition

Face API

Preview

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

Video API

Preview

Analyze, edit, and process videos within your app

Language

Bing Spell Check API

Detect and correct spelling mistakes within your app

Language Understanding Intelligent Service

Preview

Teach your apps to understand commands from your users

Linguistic Analysis API

Preview

Easily parse complex text with language analysis

Text Analytics API

Preview

Detect sentiment, key phrases, topics, and

Translator API

Translate speech and text with a simple REST API call

Web Language Model API

Preview

Leverage the power of language models trained

Search

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 News Search API

Link your users to robust and timely news searches

Bing Video Search API

Trending videos, detailed metadata, and rich results

Bing Web Search API

Connect powerful search to your apps

Speech

Bing Speech API

Preview

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

Custom Recognition Intelligent Service (CRIS)

Private Preview

Fine-tune speech recognition for anyone, anywhere

Speaker Recognition API

Preview

Give your app the ability to know who's talking

Knowledge

Academic Knowledge API

Preview

Explore relationships among academic papers, journals, and authors

Entity Linking Intelligence Service

Preview

Contextually extend knowledge of people, locations, and events

Knowledge Exploration Service

Preview

Add interactive search over structured data to your project

Recommendations API

Preview

Available APIs

Speech APIs

Converts speech to text, and back again

Identify a speaker based on the voice

Language APIs

Understand commands using Machine Learning

Detects language, topics, key phrases

Spell check

Knowledge APIs

Link entities based on their properties

Provide custom recommendations

Search APIs

Search images, news, videos, web,..

Autosuggests options for searches

Vision APIs

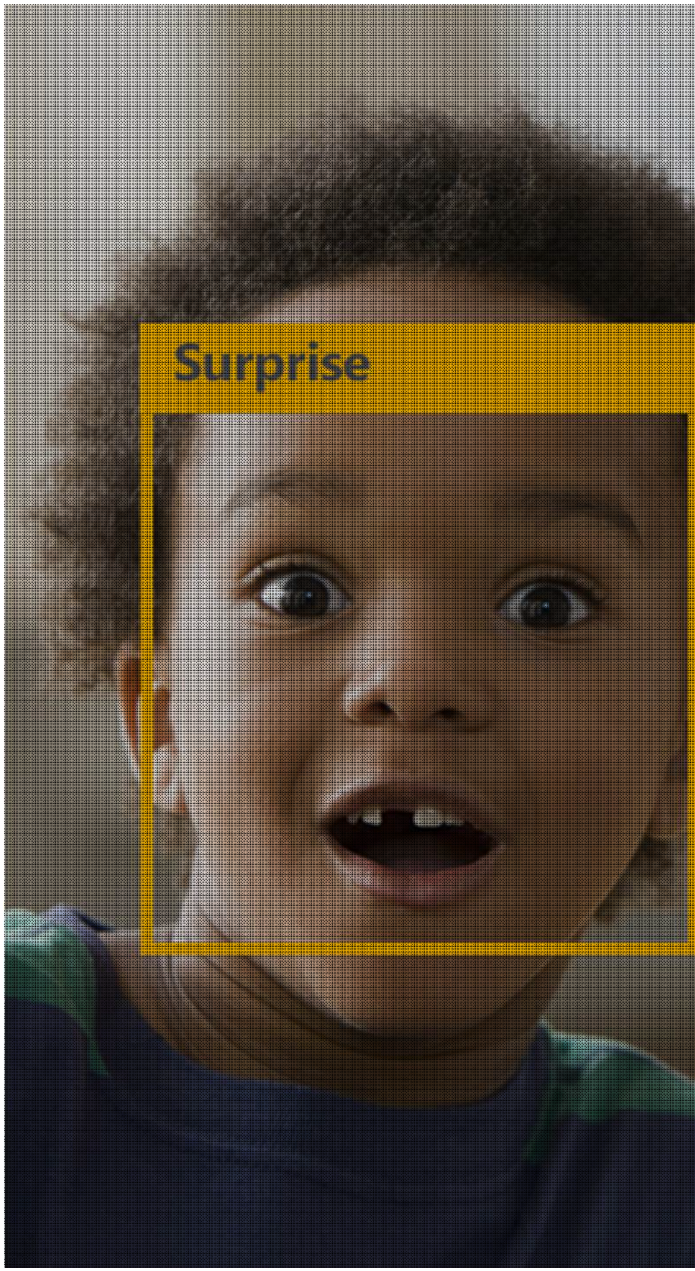
Vision APIs

Allow your apps to understand image and video.

Computer Vision
Analyse image, read text in image, …

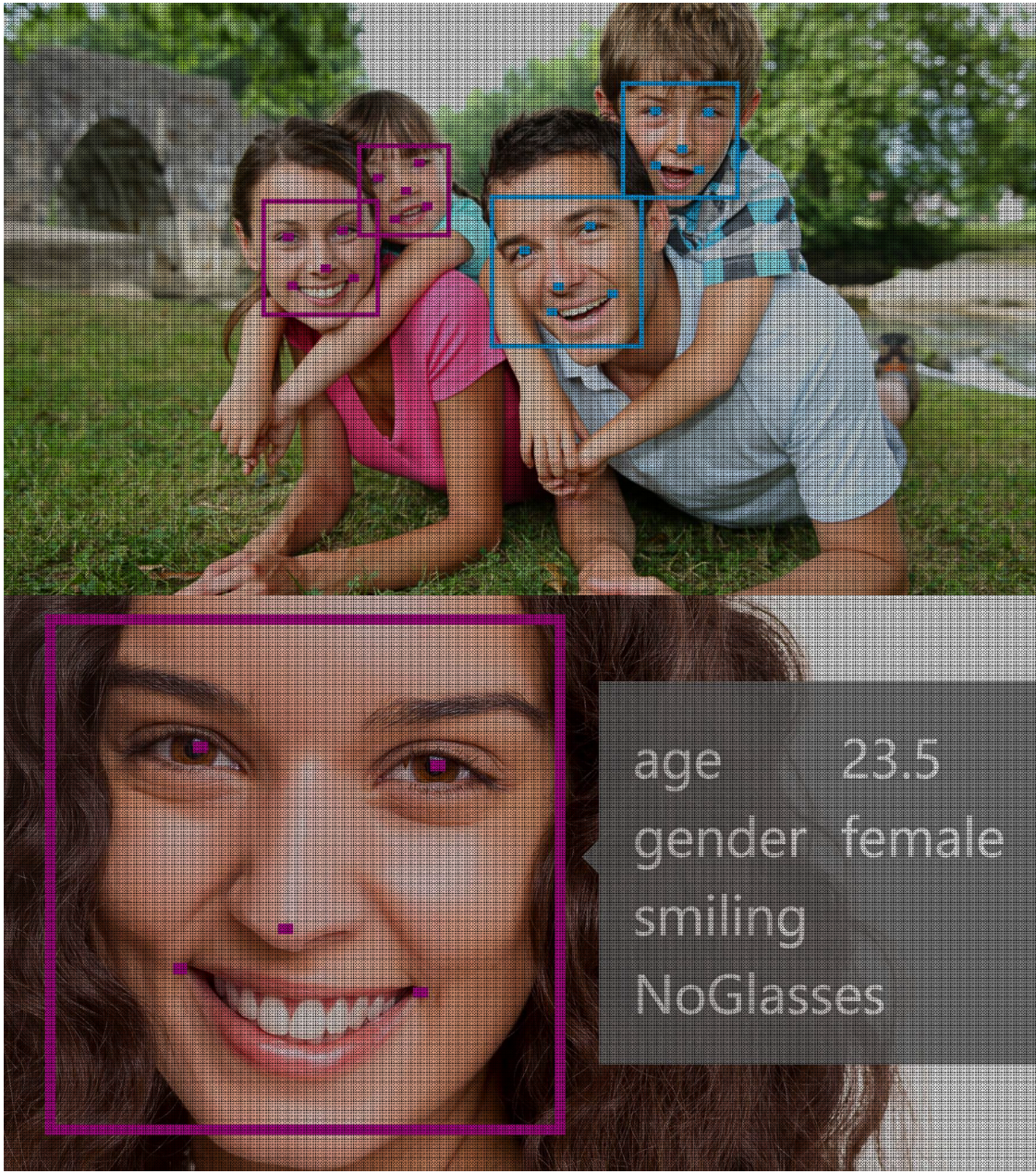
Face & Emotion
Detect, analyse and identify faces, get emotions, …

Video
Analyse in near real time, stabilise shaky videos, track faces, …



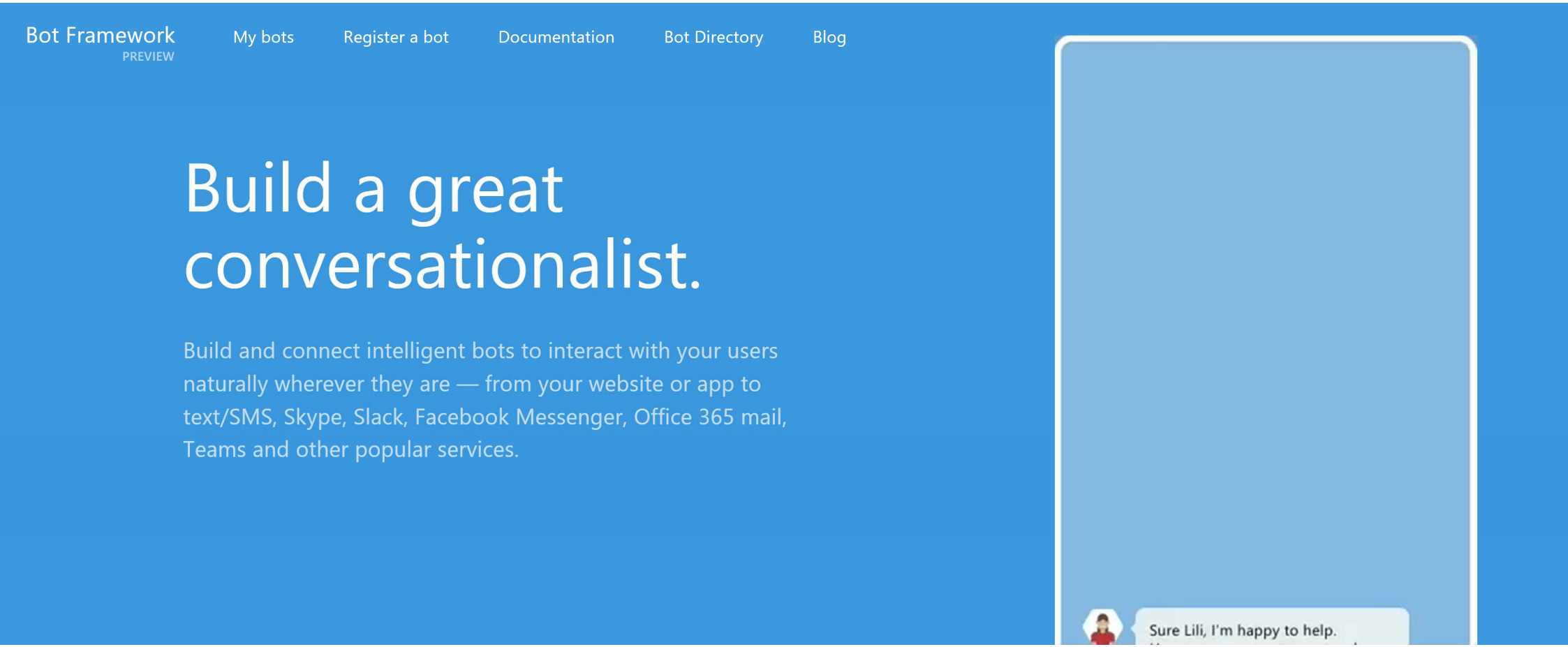
Face Detection

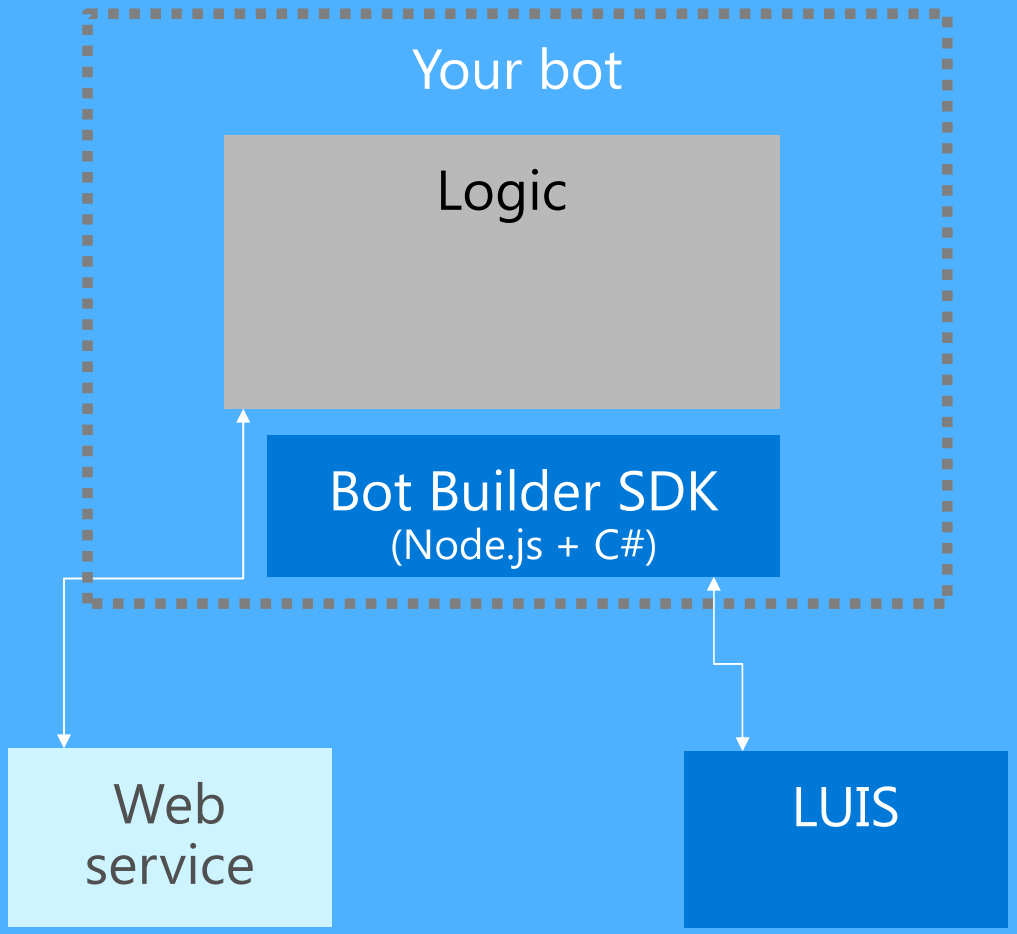
Detect faces from picture and describe them !



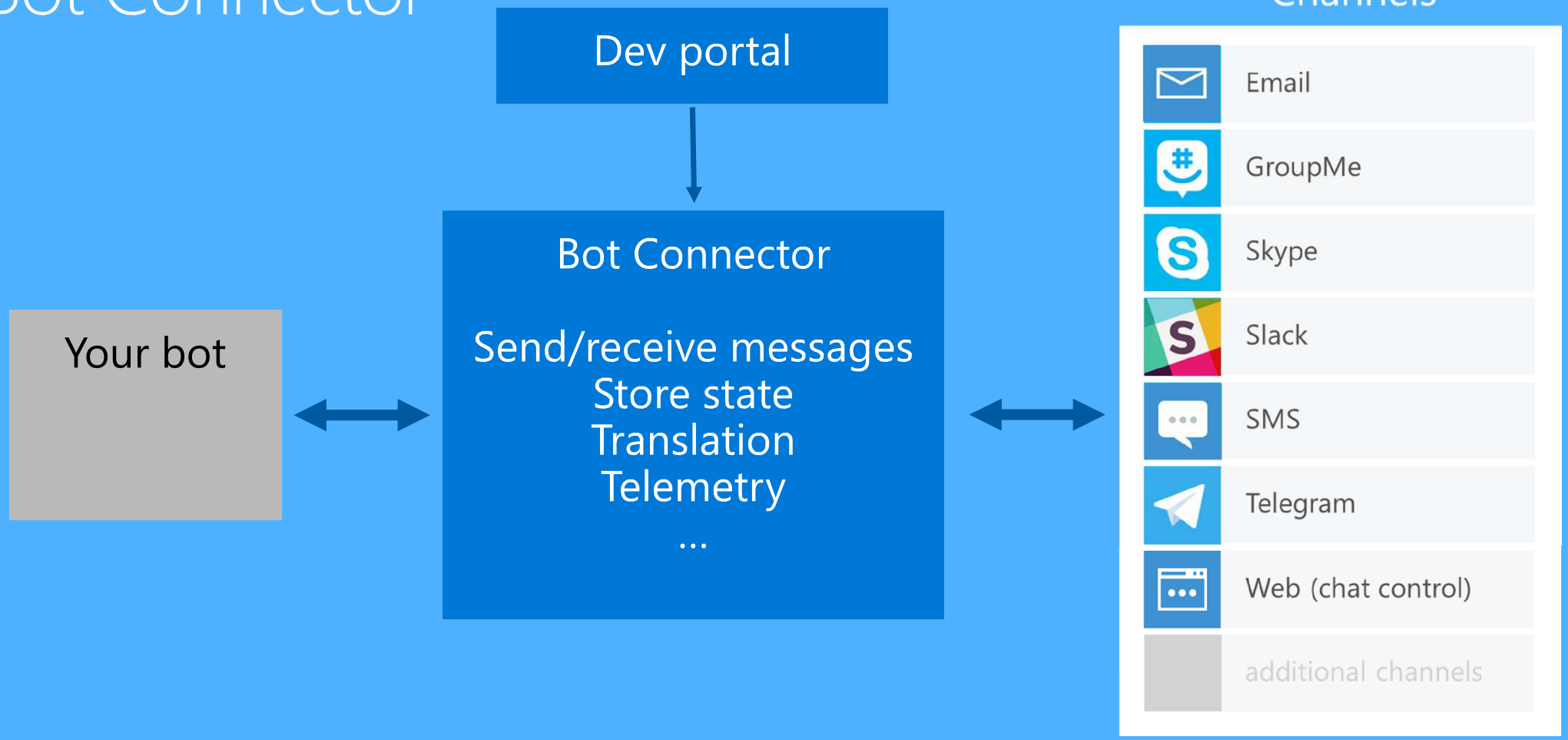
Le Bot Framework

https://dev.botframework.com/




Your bot
Logic
Bot Builder SDK
(Node.js + C#)
Web service
LUIS

Bot Connector



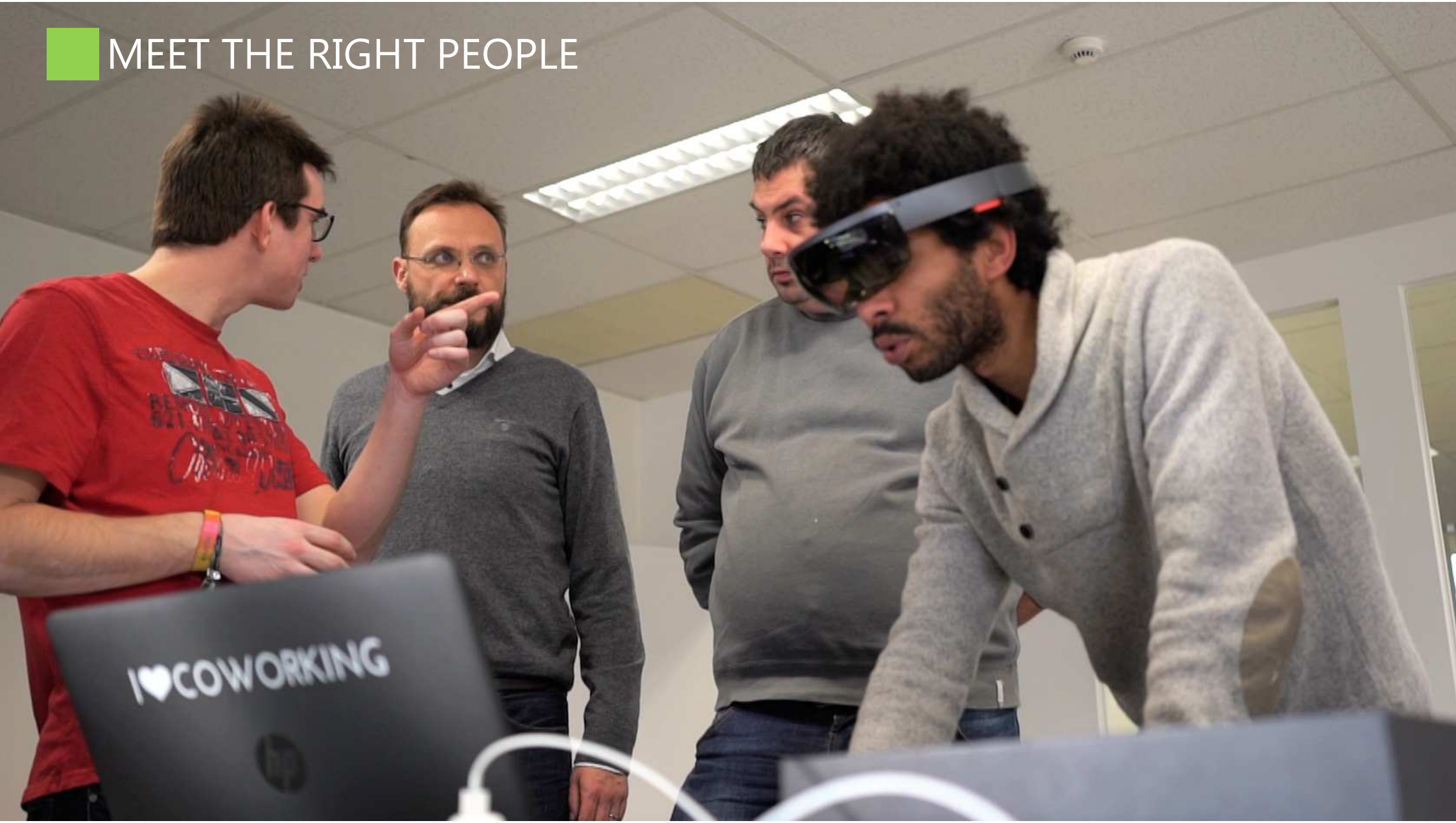
Bots are the New Apps

Voice is the User Interface

AI is the Protocol

Messaging Apps are the Browsers

MEET THE RIGHT PEOPLE



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