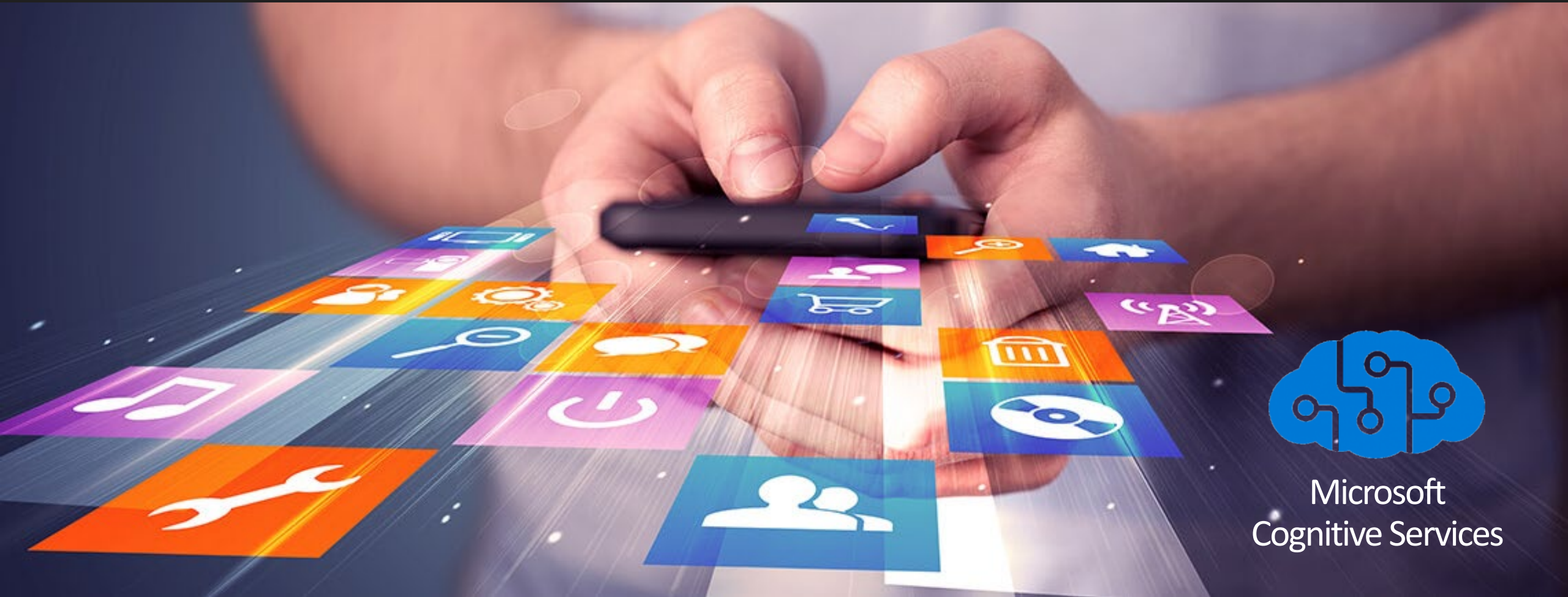
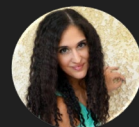


Apply Artificial Intelligence to your Mobile Application



Microsoft
Cognitive Services



Georgia Kalyva
Development Department Manager– B.Sc., MCP, Senior MSP





CANDI

ADVANCED BUSINESS AND DIGITAL SOLUTIONS

Technologies



Custom Development &
Business Solutions



Cross Platform
Mobile Applications



Collaboration &
Reporting



CANDI

ADVANCED BUSINESS AND DIGITAL SOLUTIONS



Microsoft

Partner

Gold Data Analytics

Gold Data Platform

Gold Windows and Devices

Silver DevOps

Silver Datacenter

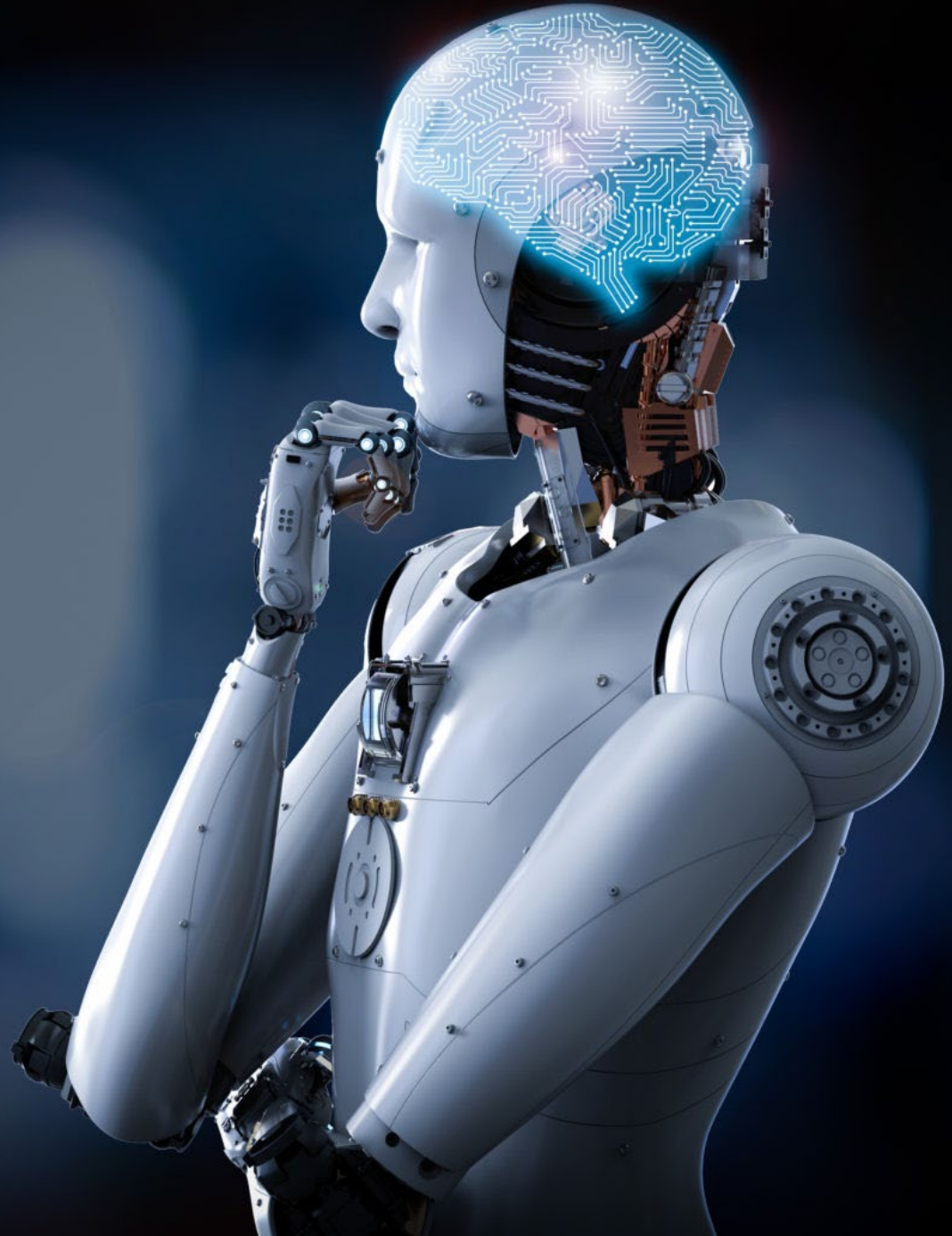
Silver Application Integration

Silver Application Development

Silver Small and Midmarket Cloud
Solutions

Definition

Artificial Intelligence is technology that appears to emulate human performance typically by learning, coming to its own conclusions, appearing to understand complex content, engaging in natural dialogs with people, enhancing human cognitive performance or replacing or supporting people on execution of tasks.





Artificial
Intelligence

VS

Natural
Intelligence


Non Creative
Precise
Consistent
Multitasking
Fast

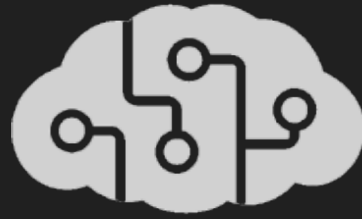
Creative
Error – prone
Inconsistent
Universal
Biased



Microsoft AI Principles

Fair | Accountable | Transparent | Ethical

- 
- 1 AI must maximize efficiencies without destroying the dignity of people
 - 2 AI must guard against bias
 - 3 AI needs accountability so humans can undo unintended harm
 - 4 AI must be transparent
 - 5 AI must be designed for intelligent privacy
 - 6 AI must be designed to assist humanity



AI TODAY?

Virtual Personal Assistants

AI
Examples
we use
daily



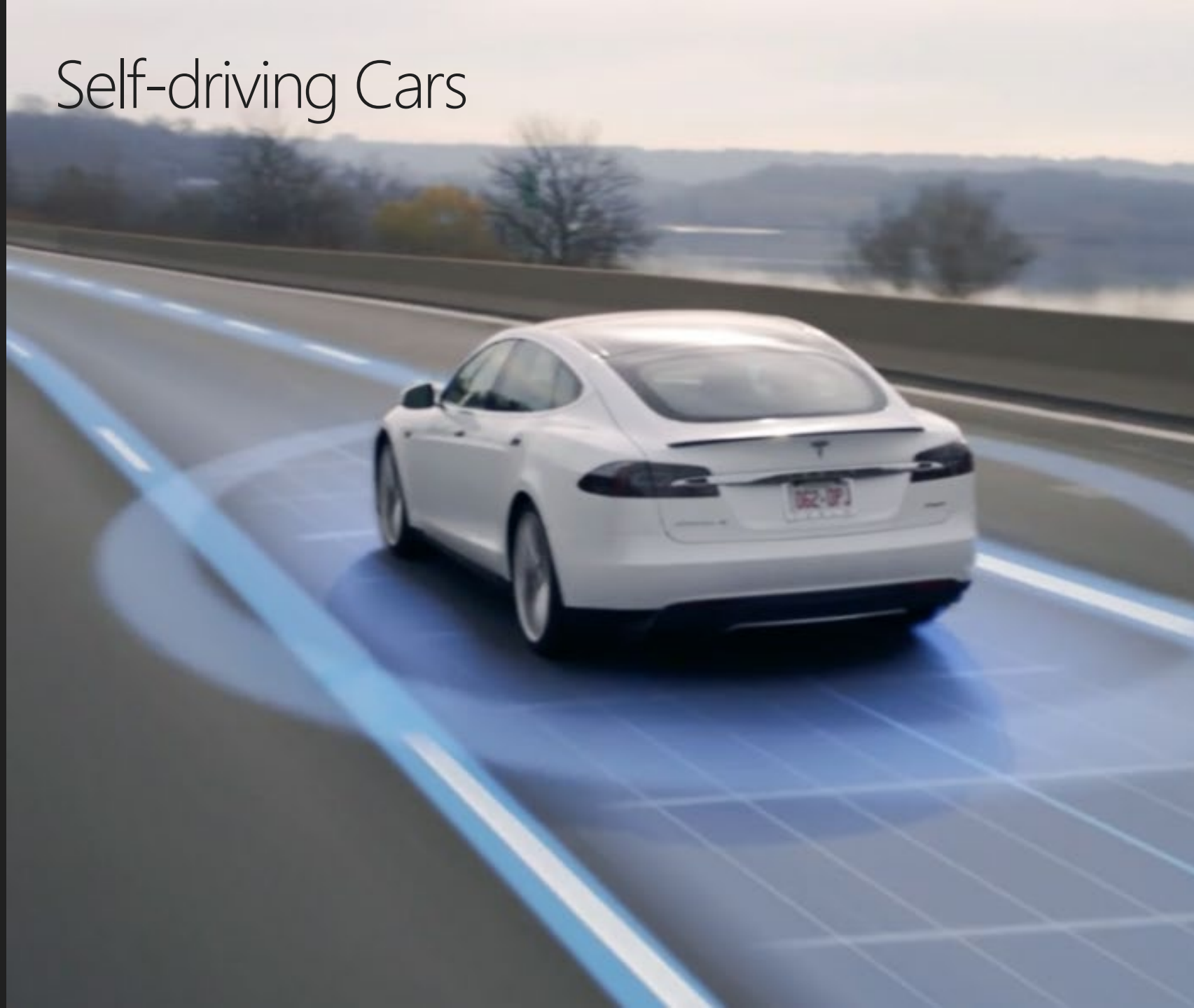
Google Assistant



Hey Cortana

Self-driving Cars

AI
Examples
we use
daily



Prediction/ Recommendations

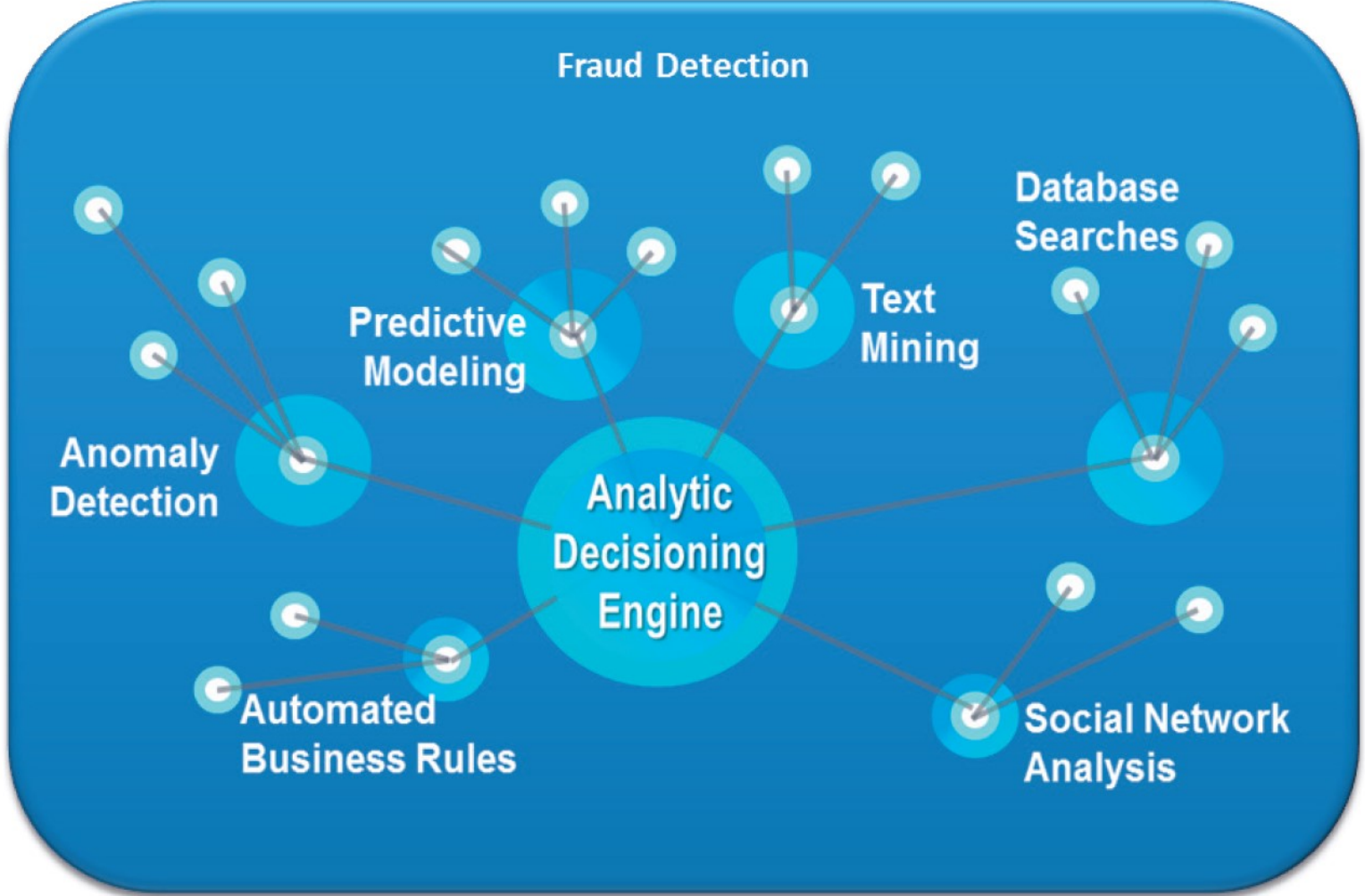


AI
Examples
we use
daily



Fraud Detection

AI
Examples
we use
daily



News Generation

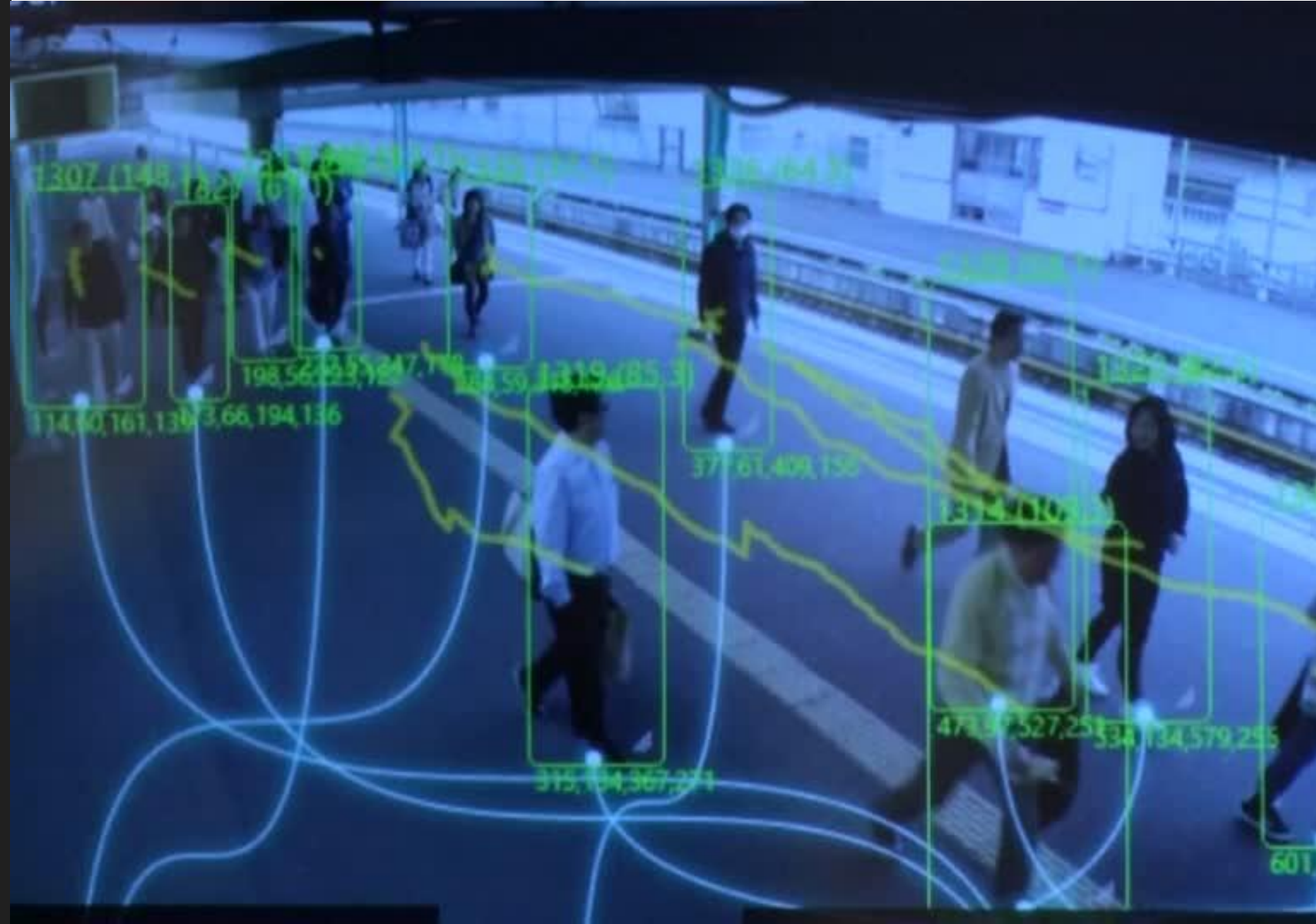
AI
Examples
we use
daily



LATEST NEWS

Security Surveillance

AI
Examples
we use
daily



Smart Home Devices

AI
Examples
we use
daily



Online Customer Support Bots

Chatbot, help me find an alternative flight.

Here are the best results based on your trip.

From Dallas (DFW)
to New York (JFK)
departing at 10:20 AM
arriving at 2:52 PM

[See All Results](#)

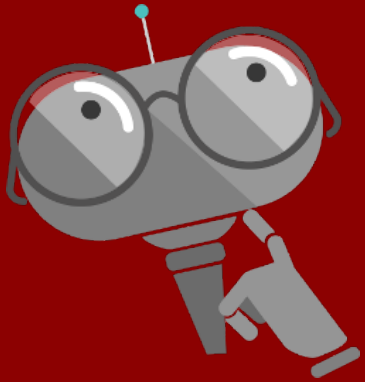


AI
Examples
we use
daily



BOTS.





What is a bot?

An application that performs one or more automated tasks.

Bots uses conversation as the interface for both internally-facing (employees) and externally-facing (customers) scenarios.

Conversational Apps are an application category of AI-based solution.

Examples of Conversational Apps

Internal Bots

Experiment and Learn

Internal Knowledge

Take existing FAQs and empower staff to provide self-serve knowledge via Bot.

IT Helpdesk

Report an IT problem and check the status. Bot can provide self-help and escalation to engineer if required.

Smart Document Agent

Search of relevant documents based on the user's needs.

Simple Customer Bots

Unauthenticated Services

General Enquiries

Handle basic customer enquiries traditionally hidden in FAQs.

Appointment Booking

Handle simple "anonymous" tasks via chat (i.e., booking an appointment)

Complex Enquiries

For requests that a Bot cannot complete hand off to a human agent.

Advanced Bots

Authenticated Services

Account Enquiry

Handle enquiries that require identification of the customer (i.e., account balance enquiry)

Make Payment

Perform actions that require a user to be authenticated and authorized, e.g. make payment to predefined payee.

Retail-bot

Send a customer with a new device to a stall to help them set up their services.



APP INTELLIGENCE.

Microsoft Cognitive Services

Give your apps a human side



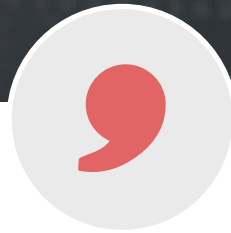
Vision

Computer Vision
Content Moderator
Emotion
Face
Video
Video Indexer
Custom Vision Service



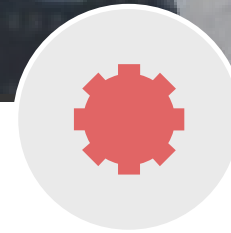
Speech

Bing Speech
Custom Speech Service
Speaker Recognition



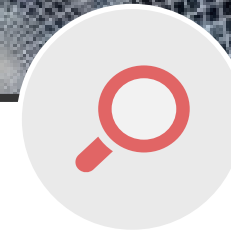
Language

Bing Spell Check
Language Understanding
Linguistic Analysis
Translator Text & Speech
Web Language Model
Text Analytics



Knowledge

Academic Knowledge
Entity Linking
Knowledge Exploration
Recommendations
QnA Maker
Custom Decision Service



Search

Bing Autosuggest
Bing Image Search
Bing News Search
Bing Video Search
Bing Web Search
Bing Custom Search



Labs

Project Prague (gesture)
Cuzco (events)
Johannesburg (routing)
Nanjing (Isochrones)
Abu Dhabi (distance matrix)
Wollongong (location)



Vision

- Computer Vision
- Content Moderator
- Emotion
- Face
- Video
- Video Indexer
- Custom Vision Service

Computer vision




Type of Image:

Clip Art Type 0 Non-clipart
Line Drawing Type 0 Non-Line Drawing
Black & White Image False

Content of Image:

Categories [{"name": "people_swimming", "score": 0.099609375 }]
Adult Content False
Adult Score 0.18533889949321747
Faces [{"age": 27, "gender": "Male", "faceRectangle": {"left": 472, "top": 258, "width": 199, "height": 199}}]

Image Colors:

Dominant Color Background White
Dominant Color Foreground Grey
Dominant Colors White
Accent Color 



Vision

- Computer Vision
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- Face
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- Custom Vision Service

Emotion API

The screenshot displays the Microsoft Emotion API interface. A central image shows a young child with a surprised expression, framed by a yellow bounding box. The word "Surprise" is written in black text on a yellow background above the box. Below the image is a teal control bar containing a camera icon, an upload icon, and a progress bar for the detected emotion. The progress bar shows "Surprise" as the most prominent emotion. To the right of the progress bar are two columns of emotion names with corresponding progress bars: "Anger", "Disgust", "Fear", and "Contempt". A small thumbnail of the child's face is visible on the far right of the teal bar. The Microsoft logo and the text "Get started for free at projectoxford.ai" are located in the bottom right corner.

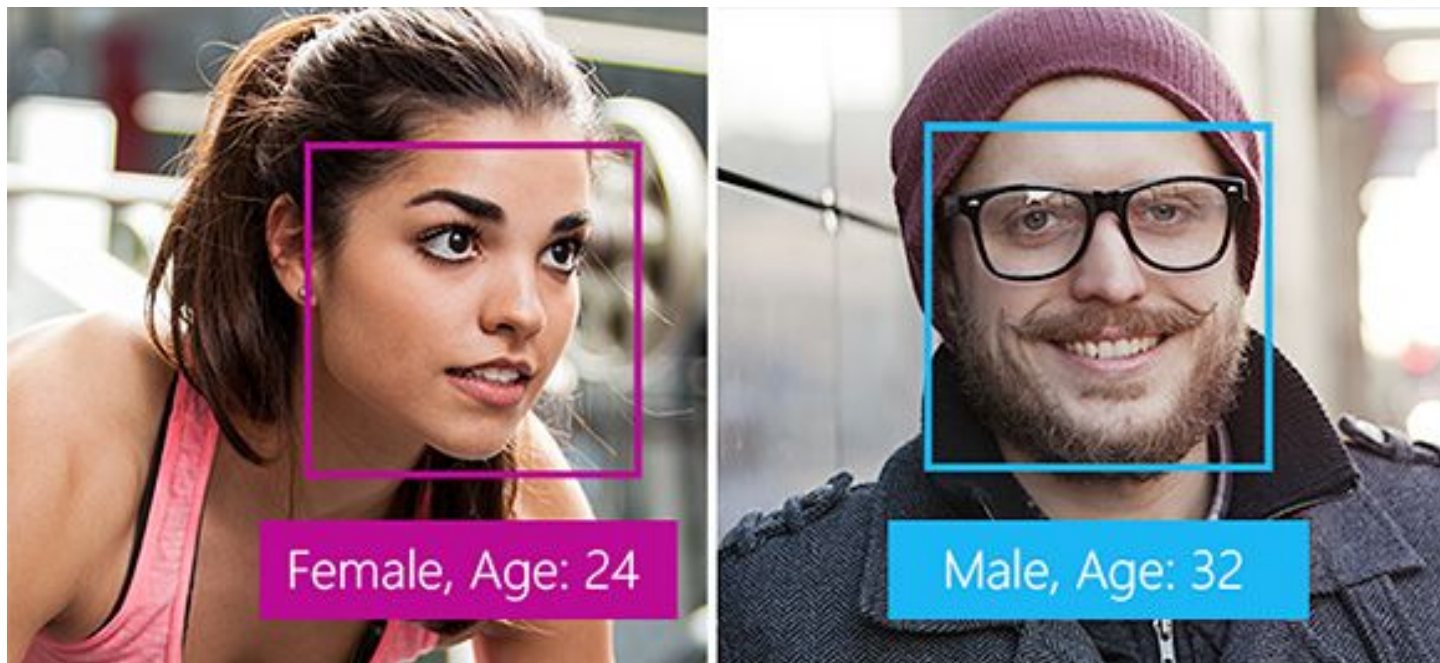
Emotion	Progress
Neutral	0%
Happiness	0%
Surprise	100%
Sadness	0%
Anger	0%
Disgust	0%
Fear	0%
Contempt	0%



Vision

Computer Vision
Content Moderator
Emotion
Face
Video
Video Indexer
Custom Vision
Service

Face API





Vision

- Computer Vision
- Content Moderator
- Emotion
- Face
- Video
- Video Indexer
- Custom Vision Service

Video Indexer



People

Satya Nadella
Microsoft CEO

Shows biography Find in Bing

Appears for a total of 53% of the entire duration

00:57:11

Speech Sentiment

- Neutral (36%)
- Positive (61%)
- Negative (3%)

Keywords

data drivers cognitive services action

neural network framework crm press opportunity



Speech

Bing Speech
Custom Speech
Service
Speaker
Recognition



Speaker Verification

Use your voice for verification. The API can be used to power applications with an intelligent verification tool. If the speaker claims to be of a certain identity use voice to verify this claim.

Speaker Identification

Identify who is speaking. The API can be used to determine the identity of an unknown speaker.

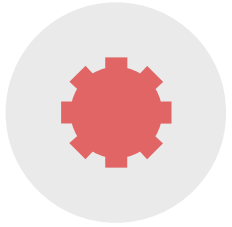


Speech

Bing Speech
Custom Speech
Service
Speaker
Recognition

Speech to Text

- Automatic speech recognition and speech transcription
- Customizable speech recognition and speech
- Customizable speech models for unique vocabularies or accents



Knowledge

Academic Knowledge

Entity Linking

Knowledge Exploration

Recommendations

QnA Maker

Custom Decision
Service

Q&A Maker

Quickly extract questions and answers from your existing content

Easily train and improve your question-and-answer bot service

Preview

JSON

Answer:

QnA Maker provides an FAQ data source that you can query from your bot or application. Although developers will find this useful, content owners will especially benefit from this tool. QnA Maker is a completely no-code way of managing the content that powers your bot or application.

Score:

100

Matched questions:

- who is the target audience for the qna maker tool
- who should use qnamaker



Language

Bing Spell Check

Language

Understanding

Linguistic Analysis

Translator Text &
Speech

Web Language Model

Text Analytics

Text Analytics

“I had a wonderful trip to Seattle and enjoyed seeing the Space Needle!”

Analyzed text	JSON
i LANGUAGES:	English (confidence: 100 %)
i KEY PHRASES:	Seattle, wonderful trip, Space Needle
i SENTIMENT:	98 %
i LINKED ENTITIES (PREVIEW):	I had a wonderful trip to Seattle and enjoyed seeing the Space Needle!

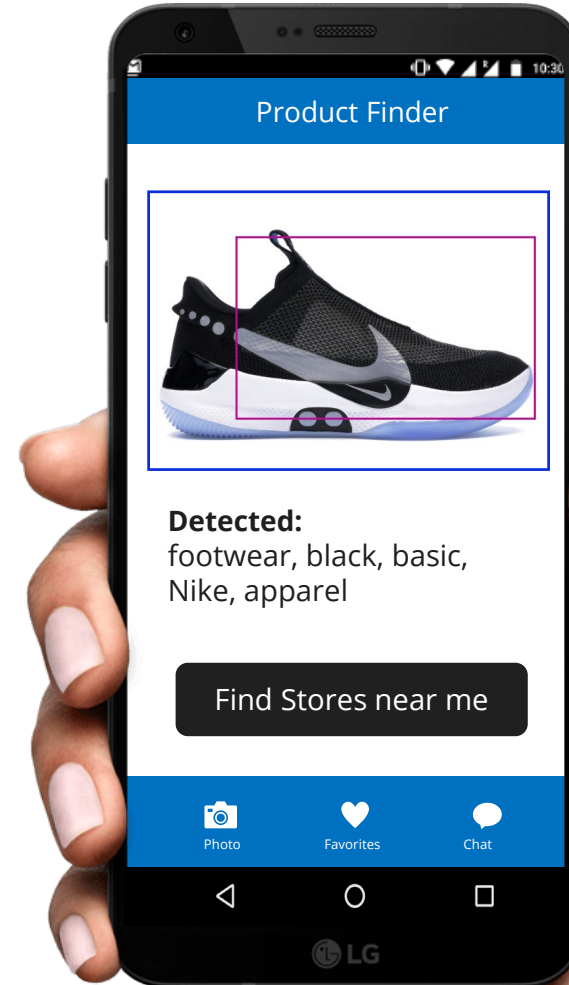


AI & CANDI.

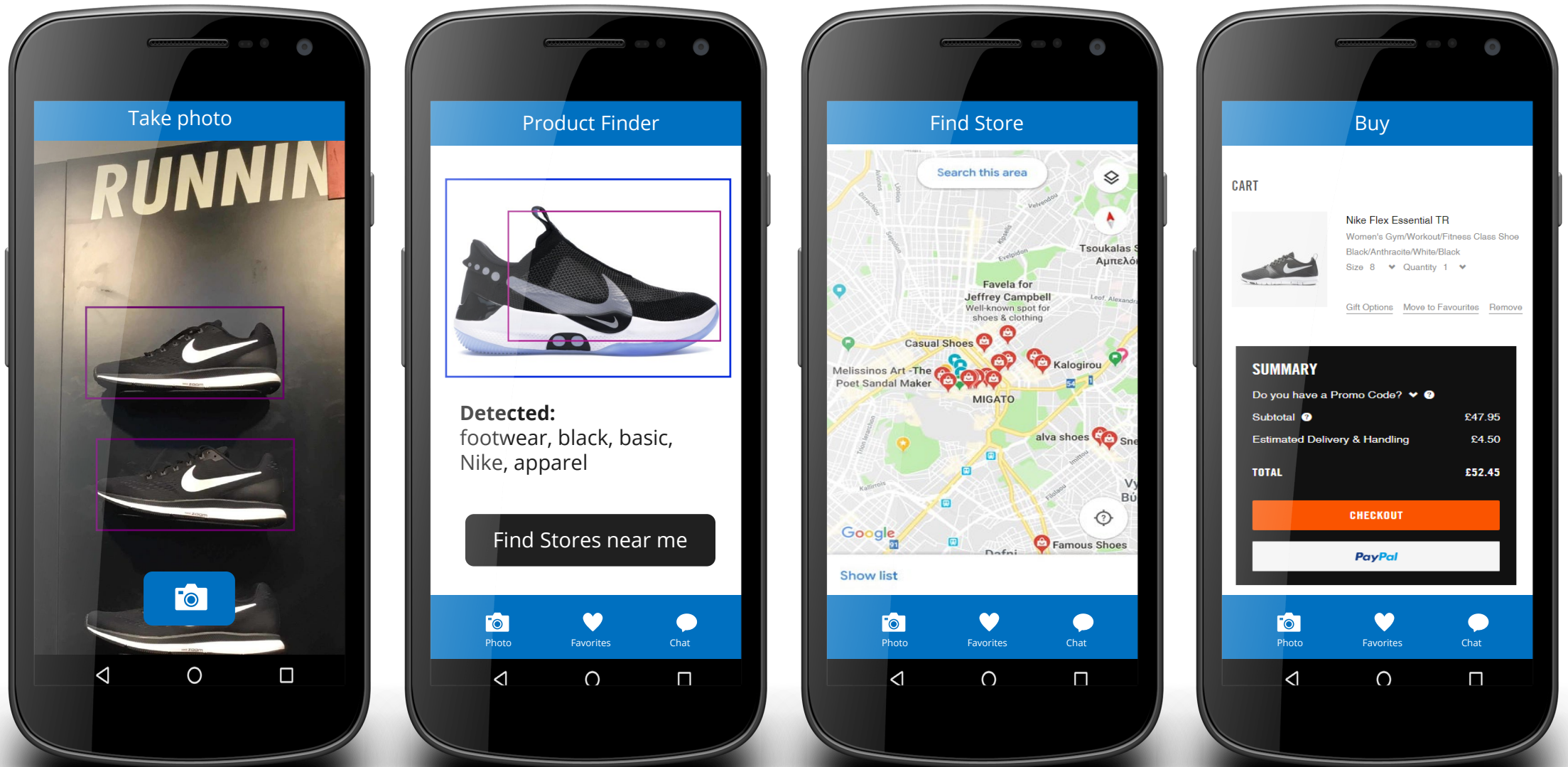
Cognitive Photo Search

Take a photo of the desired product and find **similar items** in your area using **Azure Computer Vision** and **Local Business Search**.

Buy it right away and it's already in your hands.



How it works



AI Security Monitoring System

Camera 2 Start Camera Stop Camera Train Face Models Refresh Browser Show/Hide Settings

CANDI

New incident on Locations: Candi Advanced Business and Digital Solutions

Locations

- Stavros Niarchos Foundation Cultural Center
- CANDI Advanced Business and digital solutions
- Home
- Office Space

Location Status Overview

CANDI Advanced Business and Digital Solutions

Status: Alarm
CANDI Advanced Business and Digital Solutions
Address: Lekka 31, 10562 Syntagma
Tel: (+30) 210 3234617
Fax: (+30) 216 3234617
Reset Location Alarms

Time Stamp	Incident
2019-05-13T22:40:02	Unidentified female 24 (Neutral, 0.999) with electronic device.
2019-05-13T22:39:59	Unidentified - with sunglasses.
2019-05-13T22:39:54	Unidentified female 24 (Neutral, 0.987) with sunglasses.
2019-05-13T22:39:47	Unidentified female 23 (Neutral, 0.994) with sunglasses.
2019-05-13T22:39:41	Unidentified female 23 (Neutral, 0.992) with sunglasses.
2019-05-	Unidentified female 23 (Neutral, 0.996) with

Last Month Alarms

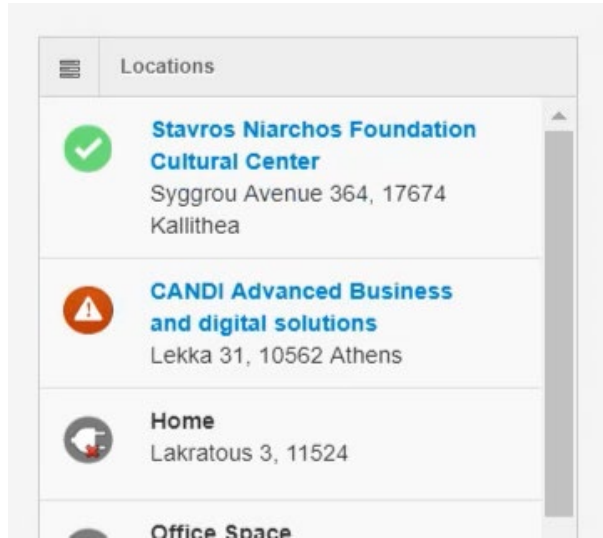
10% Alarm
90% OK

Results 13-May-19 7:41:08 PM

Location: Stavros Niarchos Foundation
People: female 23 (Neutral, 0.997)
Identified: Unknown
Objects Detected: person (1.00), human face (0.99), glasses (0.96), holding (0.92), clothing (0.91), woman (0.90), scarf (0.86), face (0.83), fashion accessory (0.80), portrait (0.80), girl (0.73)
Flagged Items: No

A second pair of eyes and identifies real-time abnormal behavior. Trained to identify illegal or forbidden items according to your needs using latest Microsoft Azure Cognitive Services technology

AI Security Monitoring System

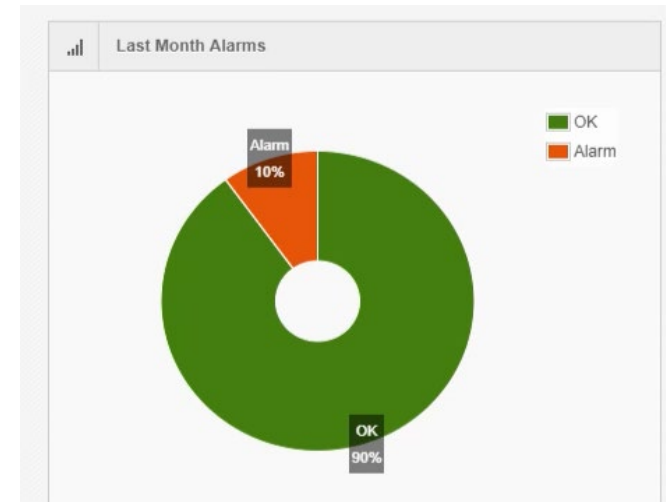


Features

- Modern interactive dashboard
- Multiple Locations Support
- Actions & Statistics available
- Continuous Training and Learning

Use Cases

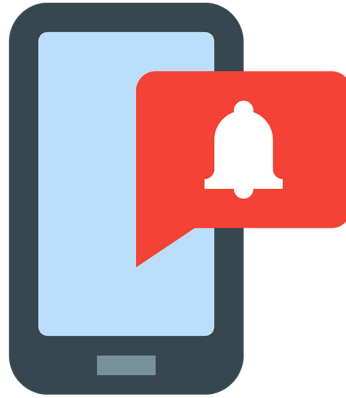
- Security and Surveillance
- Access control
- Retail analytics
- Loyalty programs



Integrations



3rd party
applications



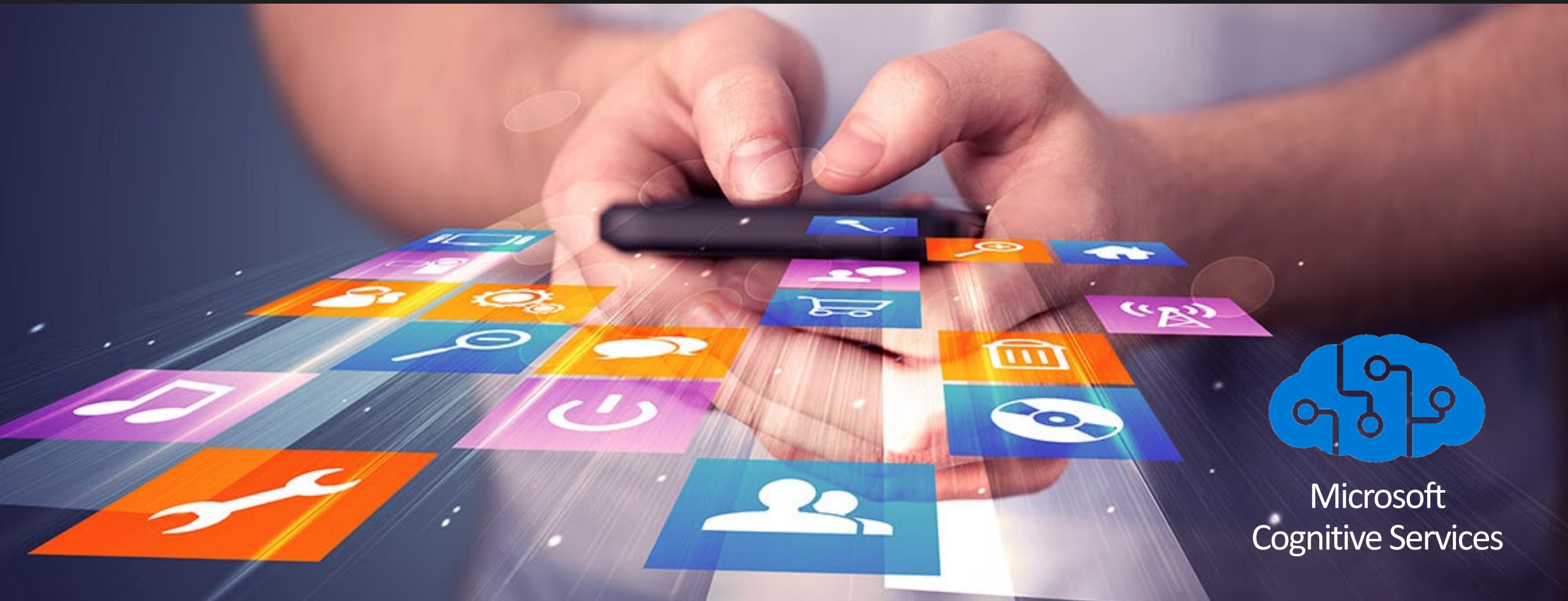
Mobile
Notifications



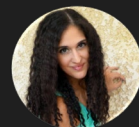
Loyalty
programs



Thank you :)



Microsoft
Cognitive Services



Georgia Kalyva
Development Department Manager– B.Sc., MCP, Senior MSP

