

# Maratona Bots

## Módulo 4

## Microsoft Cognitive Services





 [linkedin.com/in/vitormeriat](https://www.linkedin.com/in/vitormeriat)  
 [twitter.com/vitormeriat](https://twitter.com/vitormeriat)  
 [github.com/vitormeriat](https://github.com/vitormeriat)

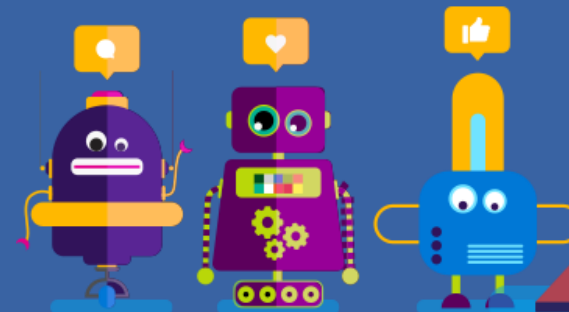
Technical Evangelist at **ESX**  
**Microsoft MVP Azure.**



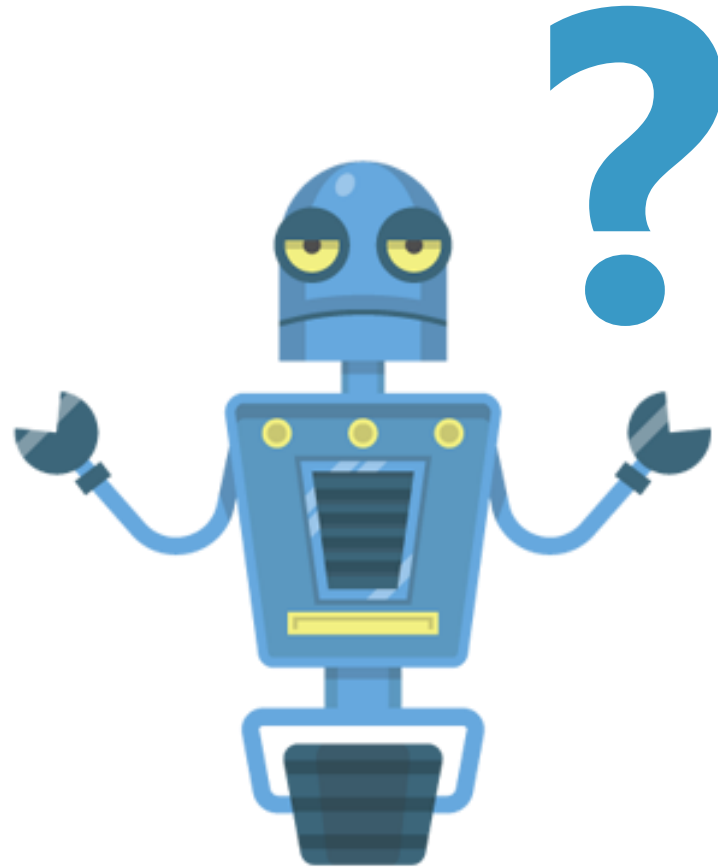
# VitorMeriat.com.br



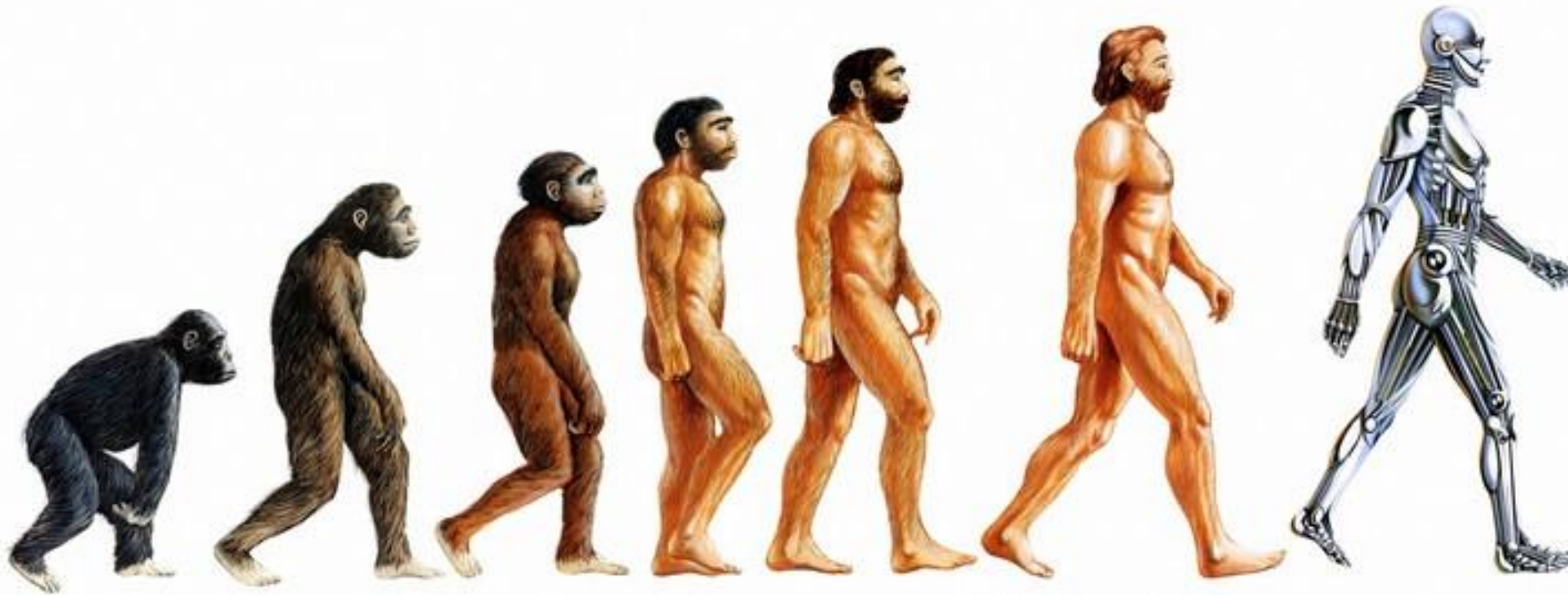
# Visão geral do Microsoft Cognitive Services



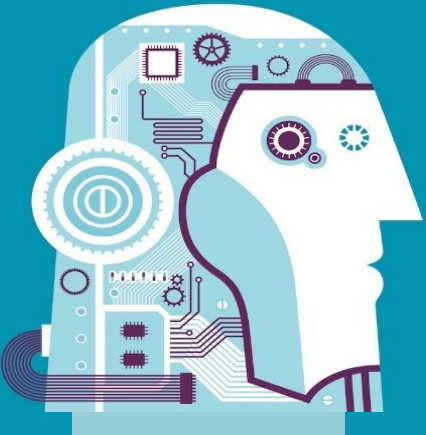
# Nosso objetivo



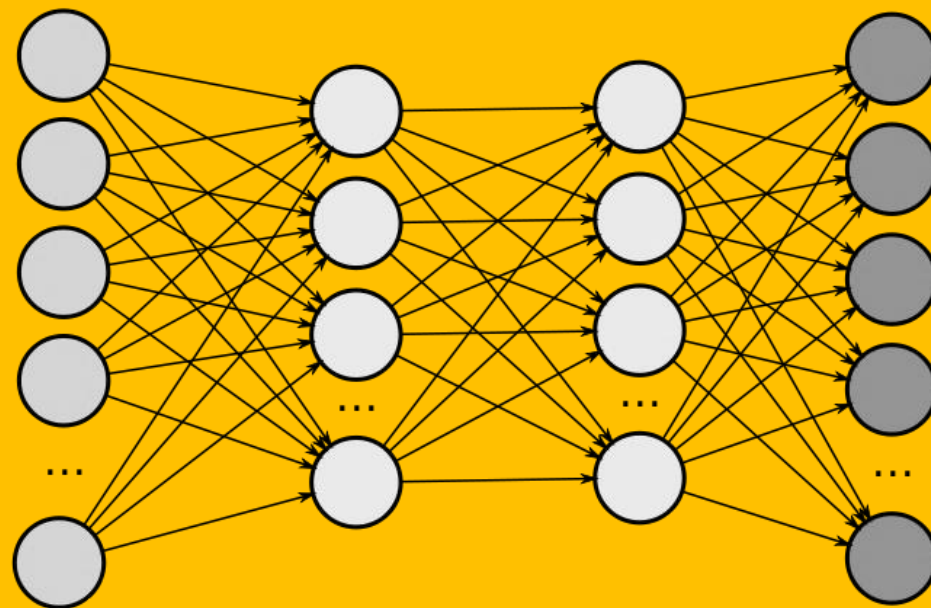
# Inteligência Artificial



# Machine Learning



# Deep Learning



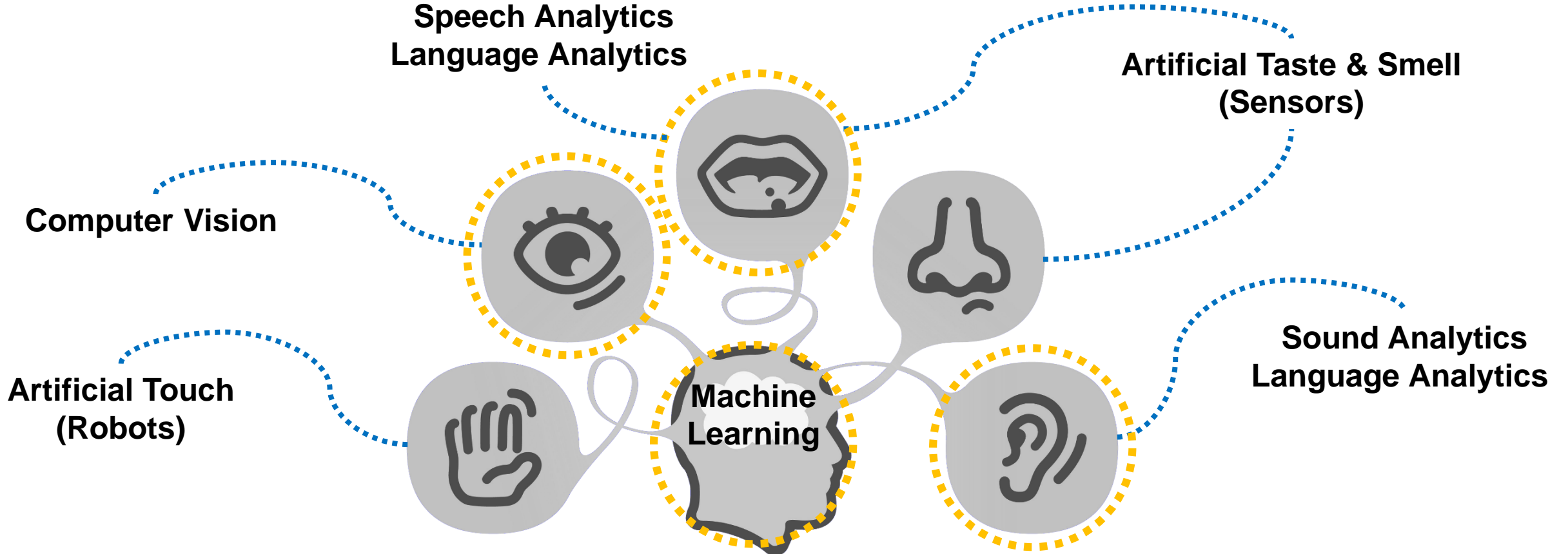
# Cognitive Computing





# O que é computação cognitiva?

Área da Computação que estuda e desenvolve algoritmos que “tentam” imitar o processo da Inteligência Humana, de aprender, sentir, identificar e resolver problemas.



# Cognitive Services



Vision

Computer vision  
Face  
Emotion  
Content Moderator  
Video

**NEW**  
**Video Indexer**

**NEW**  
**Cognitive Services Labs**



Language

Text analytics  
Spell check  
Web language model  
Linguistic analysis  
Translator



Speech

Speaker recognition  
Speech



Search

Web search  
Image search  
Video search  
News search  
Autosuggest



Knowledge

Academic knowledge  
Entity linking service  
Knowledge exploration  
Recommendations  
QnA maker

# Cognitive Services

## Vision

Computer vision  
Face  
Emotion  
Content Moderator  
Video

**NEW**  
**Video Indexer**

**NEW**  
**Cognitive Services Labs**

## Language

Text analytics  
Spell check  
Web language model  
Linguistic analysis  
Translator

**Custom**  
Language  
Understanding

## Speech

Speaker recognition  
Speech

**Custom**  
Speech Service

## Search

Web search  
Image search  
Video search  
News search  
Autosuggest

**NEW**  
**Custom**  
Search

## Knowledge

Academic knowledge  
Entity linking service  
Knowledge exploration  
Recommendations  
QnA maker

**NEW**  
**Custom**  
Decision Service



# 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



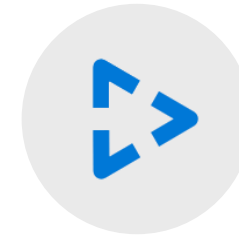
## Content Moderator

Machine-assisted moderation of text and images, augmented with human review tools



## Custom Vision Service

Customizable web service that learns to recognize specific content in imagery



## Video Indexer

Process and extract smart insights from videos



# 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 Speech Service**

Fine-tune speech recognition for anyone, anywhere

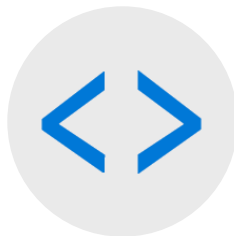


# Language



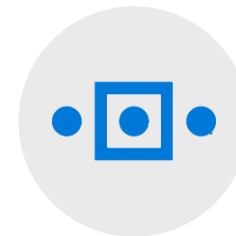
## Bing Spell Check API

Detect and correct spelling mistakes within your app



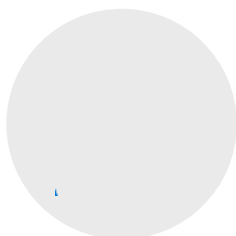
## Web Language Model API

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



## Translator

Easily perform speech and text translation



# 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



## Custom Decision Service

Create custom experiences with adaptive, contextual decision-making



## QnA Maker

Distill information into conversational, easy-to-navigate answers

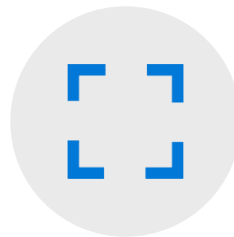


# Search



## **Bing Web Search API**

Connect powerful search to your apps



## **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



## **Bing Autosuggest API**

Give your app intelligent autosuggest options for searches



## **Bing Custom Search**

Create a highly-customized web search experience





# Microsoft Cognitive Services Labs

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



## **Project Prague**

Gesture based controls



## **Project Cuzco**

Event associated with Wikipedia



## **Project Johannesburg**

Route logistics



## **Project Nanjing**

Isochrones calculations



## **Project Abu Dhabi**

Distance matrices



## **Project Wollongong**

Score location attractiveness



show me  
the demo



# Onde aprender?

## Precificação

<https://www.microsoft.com/cognitive-services/en-us/pricing>

## Documentação

<https://www.microsoft.com/cognitive-services/en-us/computer-vision-api/documentation>

## SDKs e Exemplos

<https://www.microsoft.com/cognitive-services/en-us/sdk-sample>

## Suporte da comunidade

<https://stackoverflow.com/questions/tagged/microsoft-cognitive>

<https://social.msdn.microsoft.com/forums/azure/en-US/home?forum=mlapi>

<https://cognitive.uservoice.com/>

Inicie hoje mesmo:

[microsoft.com/cognitive](https://microsoft.com/cognitive)



# Maratona Bots

Microsoft Cognitive Services

