Hack Zurich

Intro Microsoft & ABB Challenge

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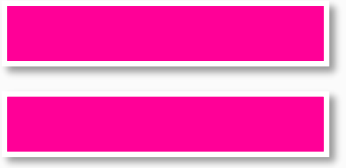
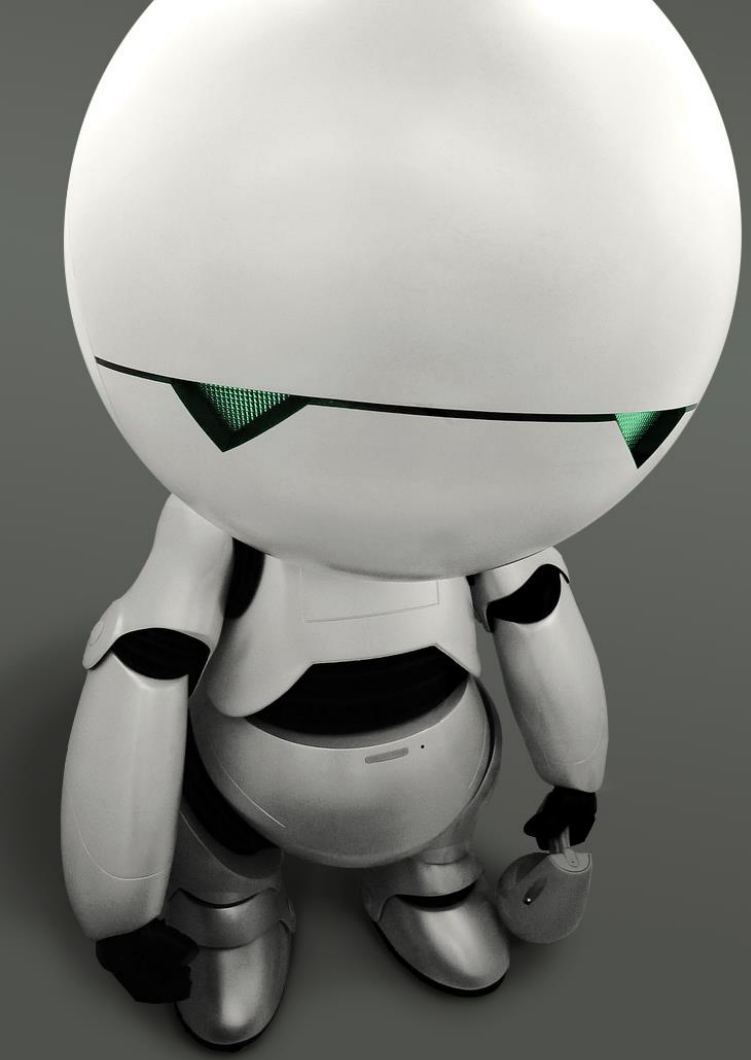
Microsoft


ABB
YuMi
Robot


Microsoft
Cognitive
Services





The Cognitive Robot

Ready Your Tools!

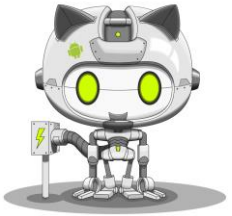
Our GitHub Repo

- ABB section for information specific to RobotStudio or YuMi
- Microsoft Section on Bot Framework, the Cognitive Services or Azure
- Misc section with sample code showing connection between YuMi & Azure

http://aka.ms/hz17

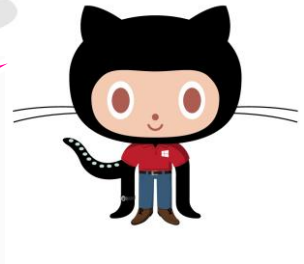
Using the RobotStudio

- Get RobotStudio on a Flash Drive (Only for Windows) **@ABB Booth**
- Download it directly: http://bit.ly/2h3wFTZ
- Instantiate a preconfigured VM running RobotStudio (see GitHub)



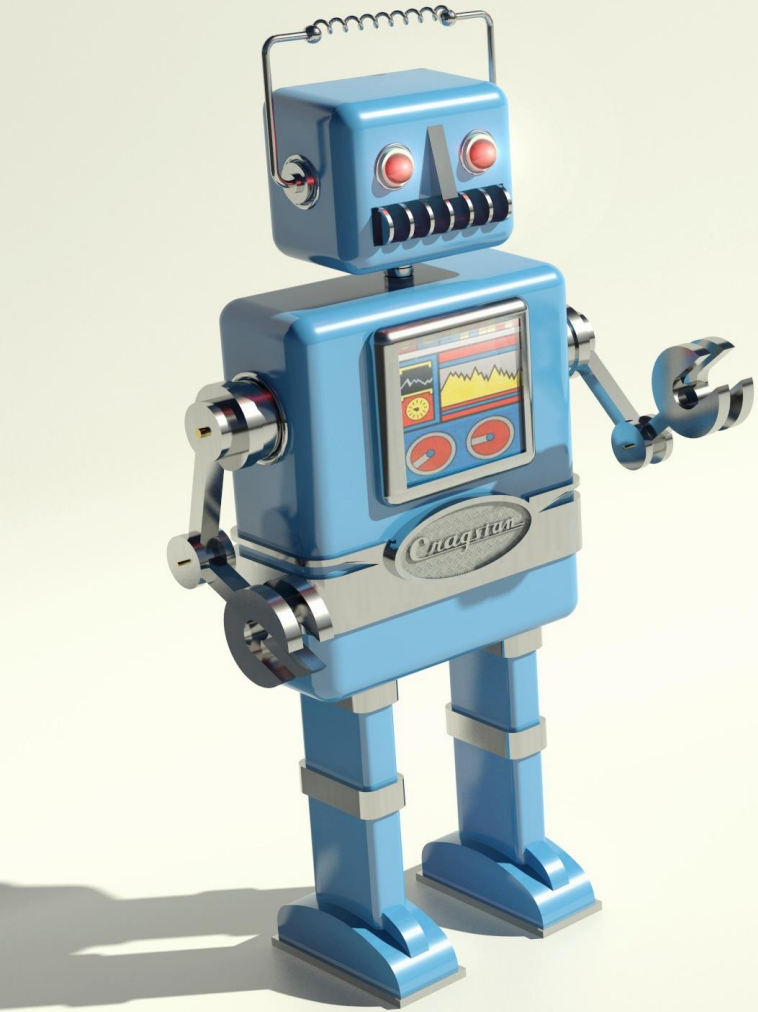
Use Azure for Free during the Hack

- Azure Voucher **@Microsoft Booth**



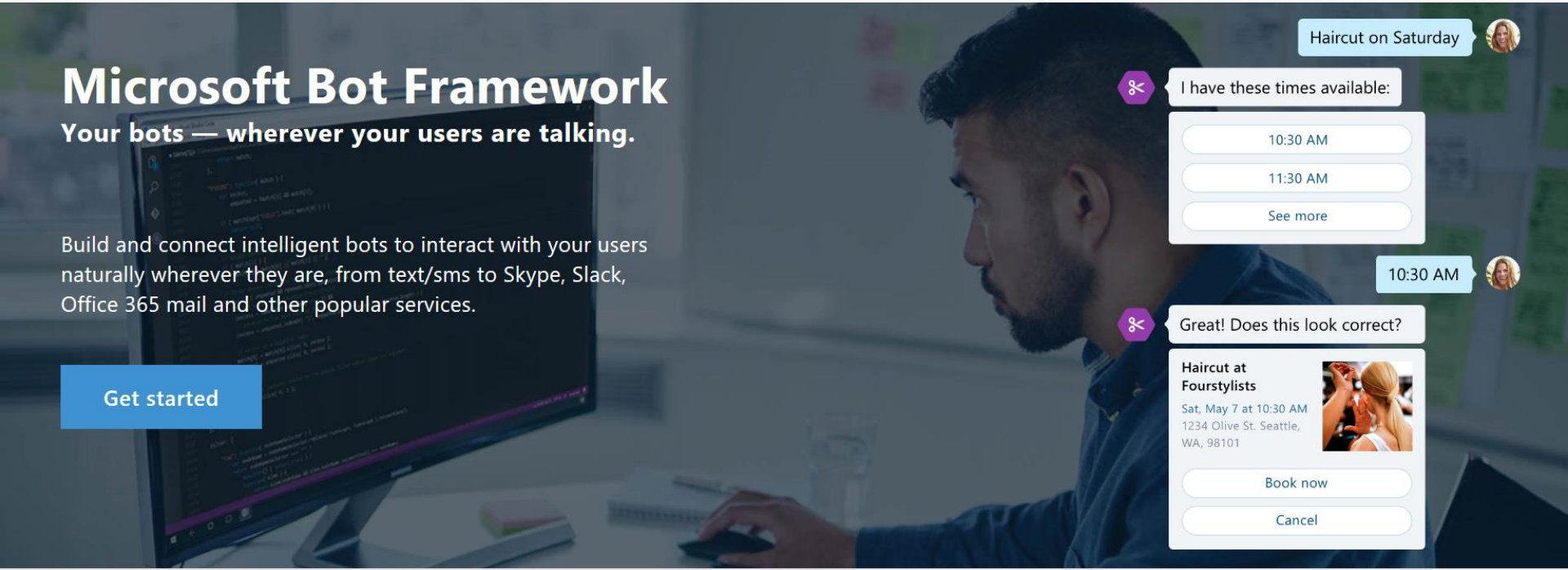
Talk to us!
We're here to help

http://aka.ms/hz17



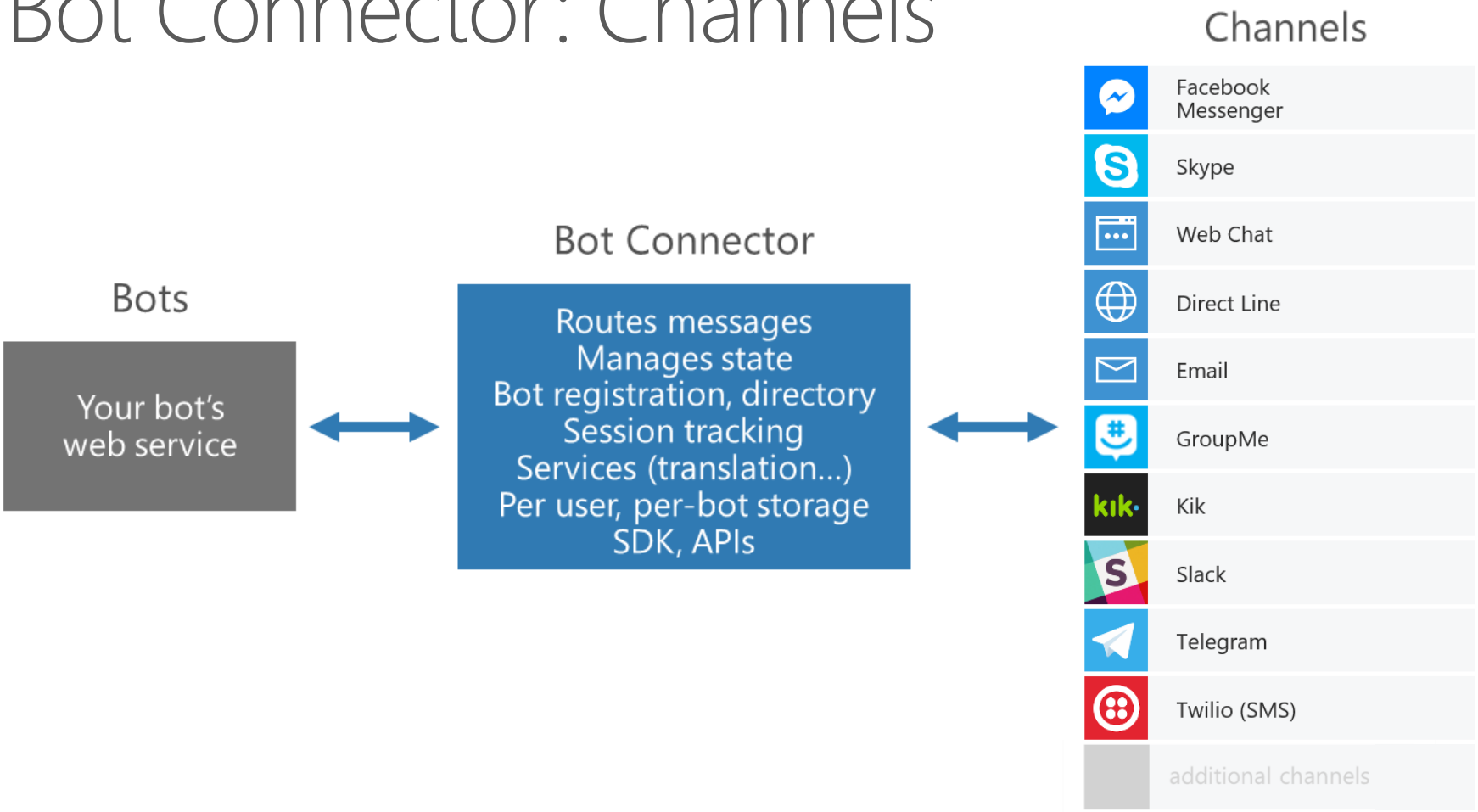
Microsoft Bot Framework

Bots: Wherever your Users Are Talking



http://botframework.com

Bot Connector: Channels



demo

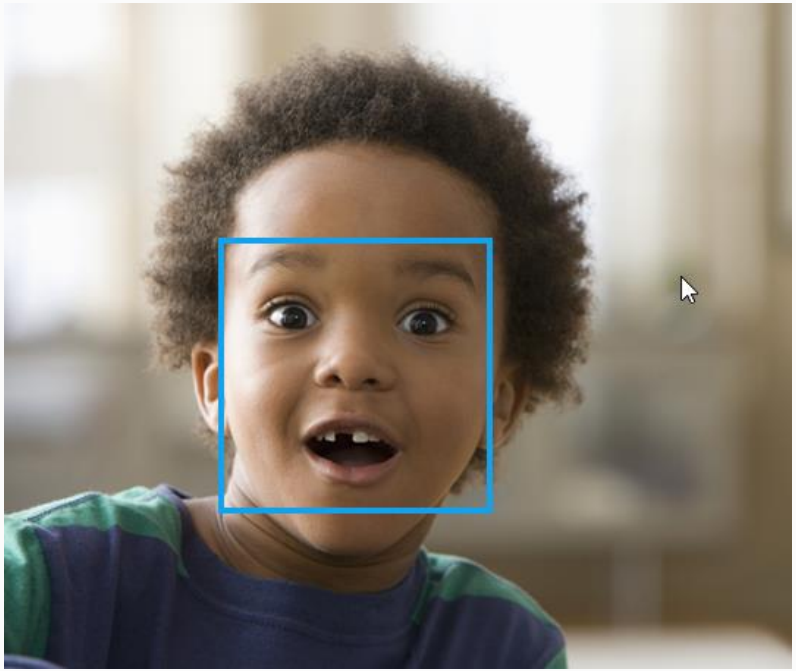
Bot Framework

Microsoft

Cognitive Services

Cognitive Services

"Enable your Apps to See, Hear, Interpret, and Interact in more Human Ways."



Emotion API


```
JSON: [
  {
    "faceRectangle": {
      "left": 175,
      "top": 187,
      "width": 215,
      "height": 215
    },
     "scores": {
       "anger": 0.000008473417,
       "contempt": 0.0000987896055,
       "disgust": 0.00003328445,
       "fear": 0.0005069857,
       "happiness": 0.132762313,
       "neutral": 0.0136927208,
       "sadness": 0.0000227907713,
       "surprise": 0.852874637
     }
  }
]
```

Cognitive Services

Give your solutions a human side

Microsoft Cognitive Services preview

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

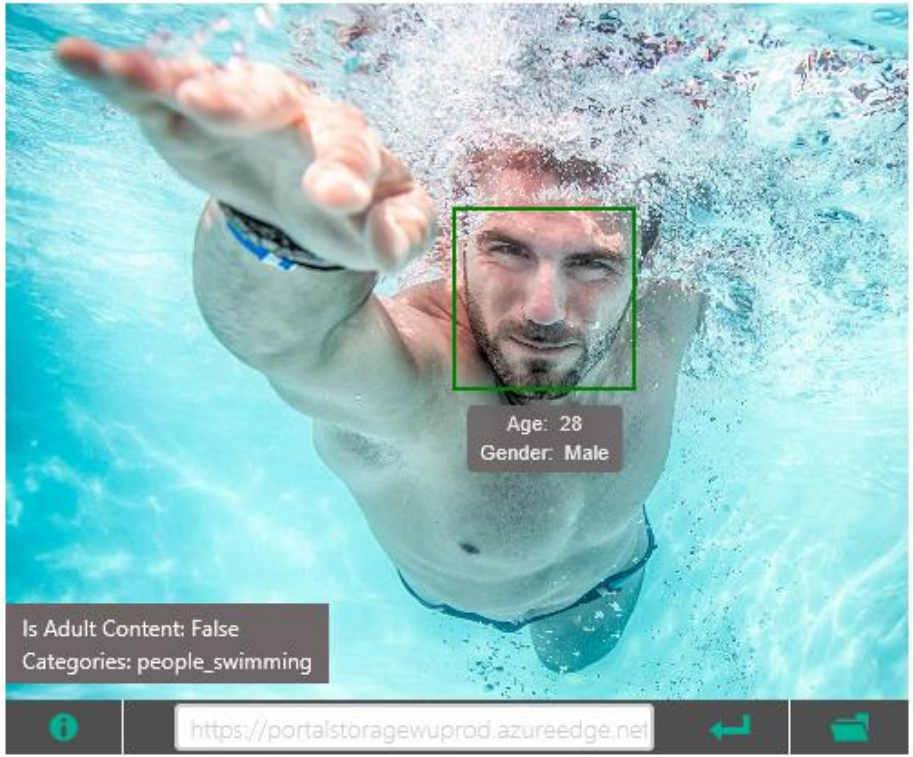
Knowledge

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

Computer Vision API



Features:

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Tags	[{ "name": "water", "confidence": 0.9996442794799805 }, { "name": "sport", "confidence": 0.9504992365837097 }, { "name": "swimming", "confidence": 0.9062818288803101, "hint": "sport" }, { "name": "pool", "confidence": 0.8787588477134705 }, { "name": "water sport", "confidence": 0.631849467754364, "hint": "sport" }]
Image Format	jpeg
Image Dimensions	1500 x 1155
Clip Art Type	0 Non-clipart
Line Drawing Type	0 Non-LineDrawing
Black & White Image	False

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

Text Analytics Service

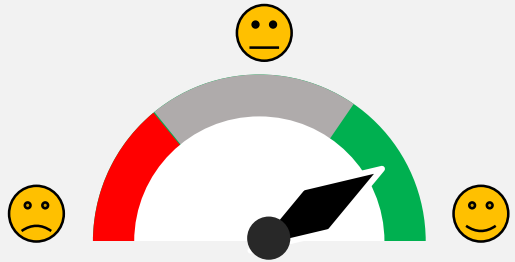
Analyzes unstructured text.

Sentiment analysis
How do your customers feel about your brand or products?

Key phrase extraction
What are your customers talking about?

"It was a wonderful hotel, with unique décor and friendly staff."

Sentiment analysis



Key phrase extraction

"It was a **wonderful hotel,** with **unique décor** and **friendly staff.**"

Interactive experience

Language Understanding Intelligent Service

Understand what Users are Saying
- Determines Intent
- Detects Entities

Seamless Integration with Speech Recognition

Learns over Time

Use pre-built, World Class Models from Bing and Cortana


```
{
  “entities”: [
    {
      “entity”: “urania”,
      “type”: “Parking”
    }
  ],
  “intents”: [
    {
      “intent”: “FindParking”,
      “score”: 0.92853384
    },
    {
      “intent”: “None”,
      “score”: 0.07289317
    },
    {
      “intent”: “RepeatLastRequest”,
      “score”: 0.0167122427
    },
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      “intent”: “ListAllParkings”,
      “score”: 0.0091929924
    }
  ]
}
```
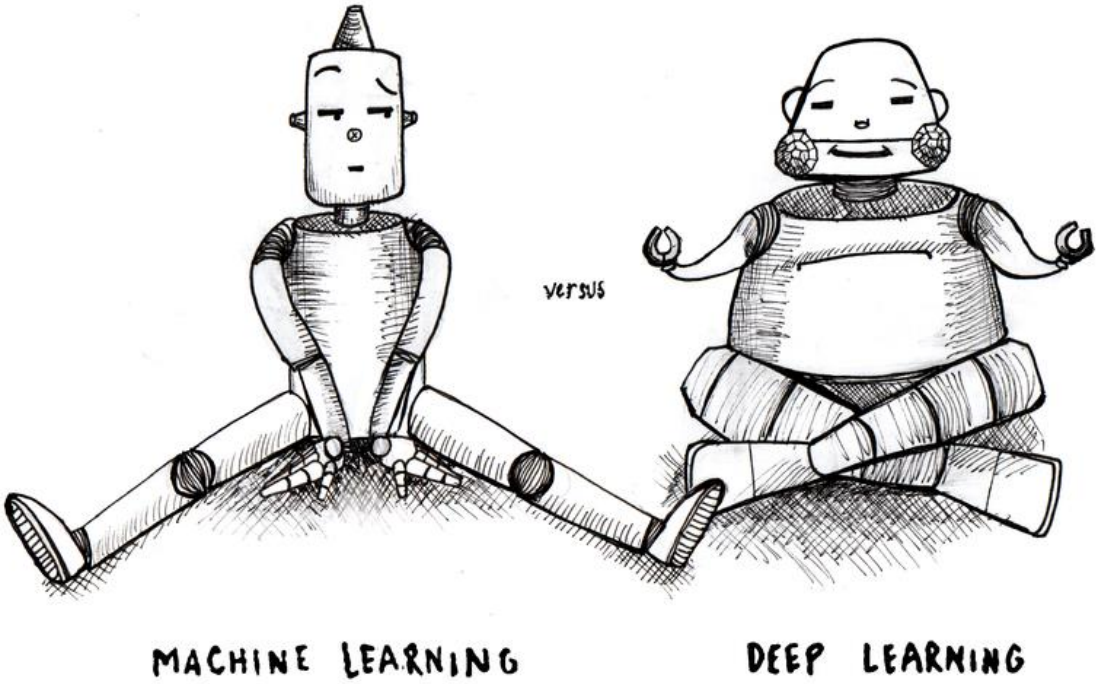

demo

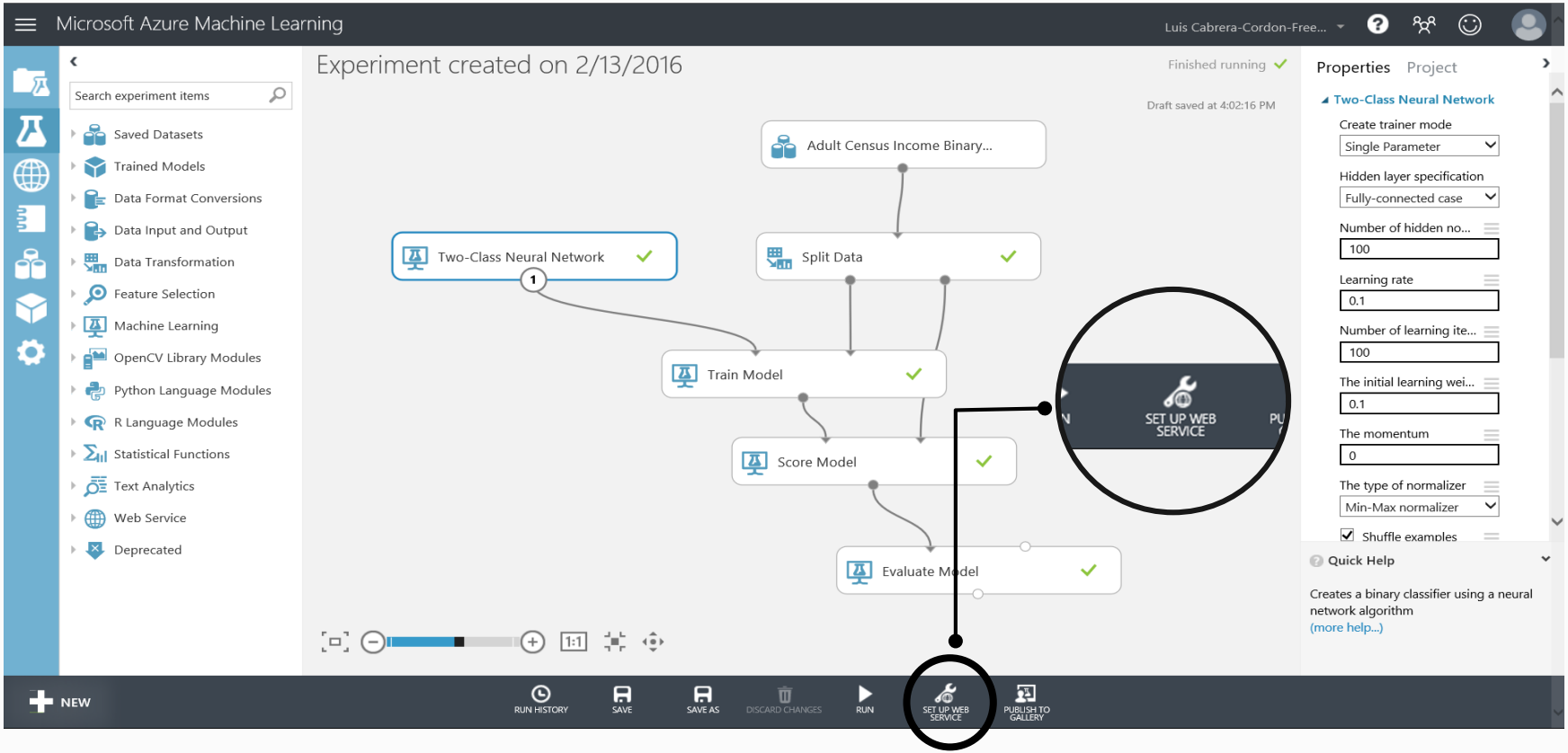
Cognitive Services

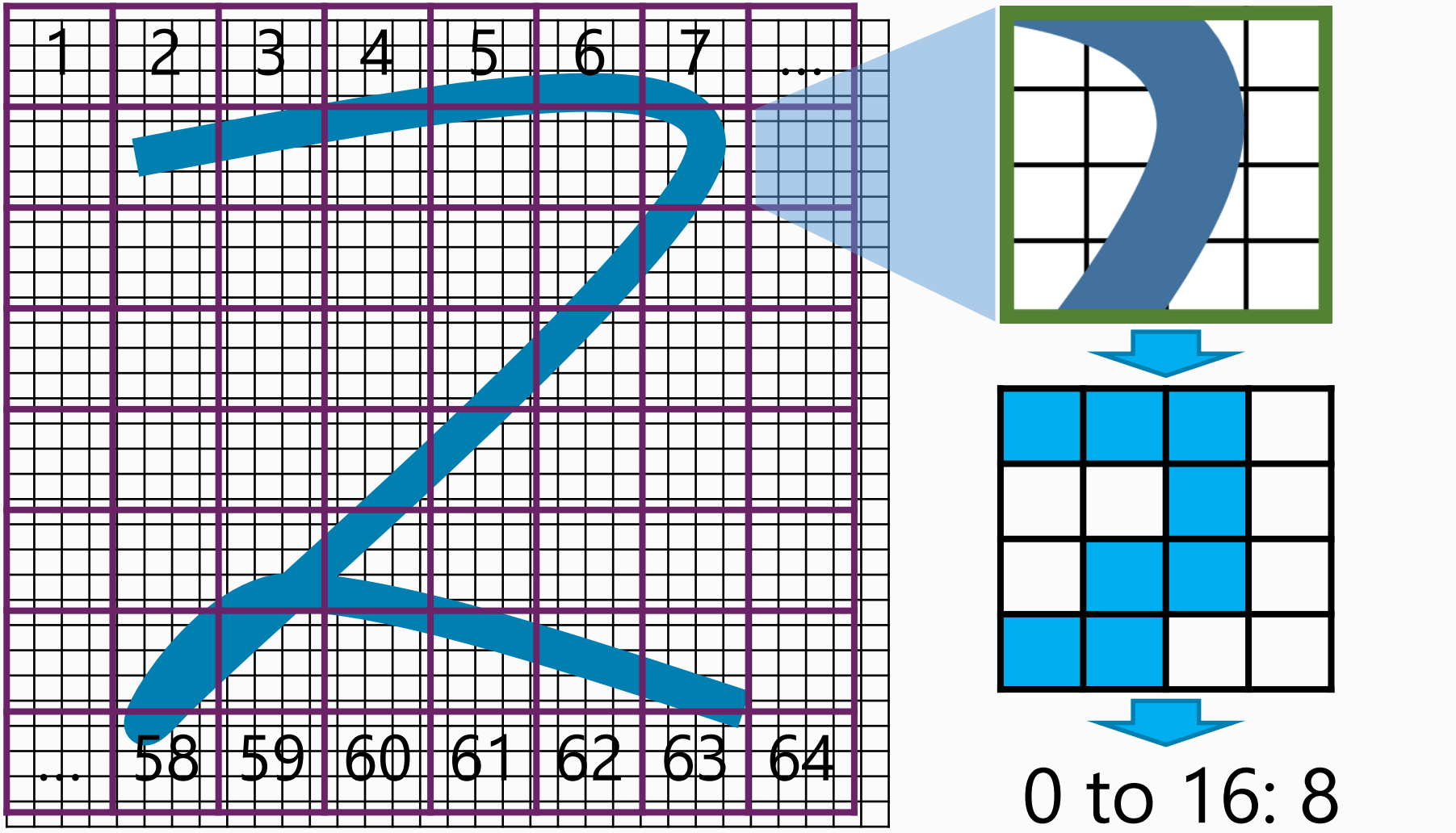
Microsoft



Machine Learning Studio

Machine Learning Studio




1 2 3 4 5 6 7 ...
... 58 59 60 61 62 63 64
0 to 16: 8

demo

Machine Learning

Microsoft

Microsoft