Microsoft Azure Cognitive Services

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Computer Vision API

Cognitive Services

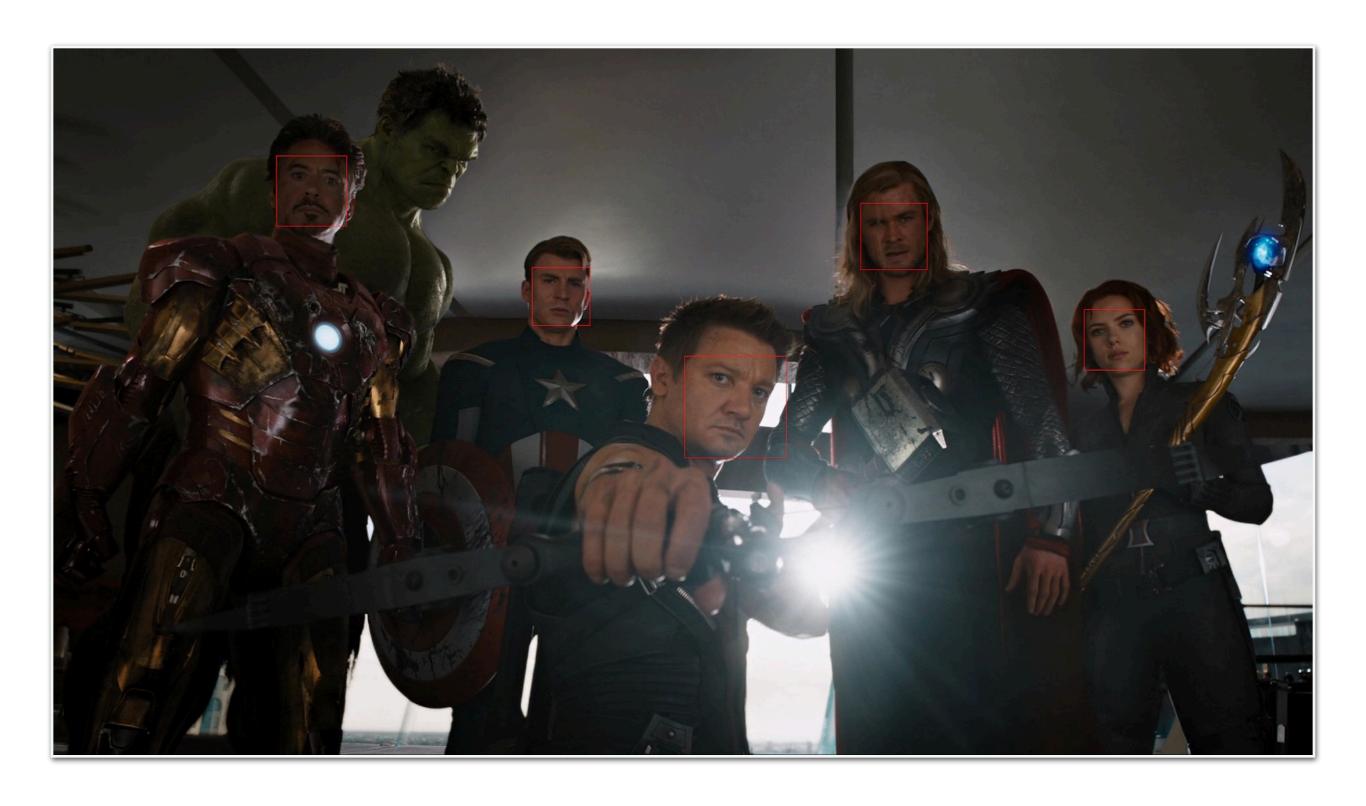
- Get to know
- Discussion
- Examples at GitHub

Computer Vision API

- Analyzes visual content in different ways based on developers' inputs.
- The computer vision is already trained with 1M celebs from our planet (demo).
- Analysis Demo: This Python code gets info about an image with a celeb(s)

Computer Vision API





- Python code that gets:
 - Info of an image with a <u>non celeb</u> (demo from the crowd):
 - Train the model during the event.
 - Show the detection after the training.

- The Python code will run under an Azure Function with blob storage.
- Python <u>example code</u>:
- LargePersonList vs. LargeFaceList:
 - LargeFaceList can hold up to 1,000,000 faces, LargePersonList can hold up to 1,000,000 persons (each person can have 248 faces).
- <u>Find Similar</u> is used for scenario like finding celebrity-like faces, similar face filtering, or as a light way face identification. But if the actual use is to identify person, please use <u>PersonGroup</u> / <u>LargePersonGroup</u> and <u>Face - Identify</u>.

How to...

- Before uploading images and start the training, use the <u>CreateTag</u> POST API: https:// southcentralus.api.cognitive.microsoft.com/ customvision/v2.0/Training/projects/{projectId}/tags? name={name}[&description]
- 2. CreateImageTags
- 3. Face API

Dummy Server



Dummy server 😜

• At first, you get a "dummy server" **you** of course need to "teach".

Batch Processing of Images

Custom APIs



Dinesh: "The core tech is valid, it's just need to be trained"

Batch Processing of Images

- Use custom API.
- Train one object (hotdog?).
- Batch process on a massive storage (example on only 100 files).
- The output should be a JSON that holds all references of hotdog (?) images.

Using Face API on an iOS app

Nikolai & Perry

Using Face API with iOS

- Uber are already using it.
- Code and example:
 - Train the service with a person.
 - Identify the person.
 - Try a fraud user.
 - Use a photo of the identified person.

Video Indexer API

Video Indexer API

- Usages:
 - How were all <u>BaracksDubs</u> made? (think about it, the creator had to view all Barack's videos to search for a suitable word for his songs)
- Demo #1: intro interviews questions:
 - What do you think about Kotlin?
 - What do you think about the Mondial?
- Demo #2: Dinesh quote regarding "Not Hotdog"

Video Indexer API

- Demo:
 - An iOS app that uploads video clip and initiates the indexing.
 - Waiting...
 - On finish: search button is on.
 - OnSearchPressed: request with the search term and present the JSON response.