Description:

The objective of this experiment is to get a feel of how machine learning can help, by exploring the already available machine learning models provided by Microsoft in its Azure platform. We have provided below guided exploration across various domains.

NOTE1: ENSURE ALL IMAGES YOU UPLOAD (or the links to the same) FOR EXPERIMENTS BELOW ARE WITHIN 4MB LIMIT THAT THE WEBSITE HAS:

NOTE2: In case you are using the 'links of images', to upload, then ensure that you image ends with the standard image file extensions. For example: https://i.vtimg.com/vi/ulR9bU5qQdM/maxresdefault.ipg (...similarly .jpeg, .png etc)

NOTE3: There are no gradings or submissions for this experiment/task.

Analyse an image:

- Access the link https://azure.microsoft.com/en-gb/services/cognitive-services/computer-vision/
- 2. Go to the section "Analyse an image" (you can search for this string).
- 3. Around the section, you will find a Textbox containing text "Image URL" beside "Submit" button for you to upload the image that you want to analyze. Enter the following link there: https://i.ytimg.com/vi/ulR9bU5qQdM/maxresdefault.jpg and click "Submit".
- 1. Feel free to experiment by finding other images containing similar images and enter the image link and 'Submit'. If your image is in the local machine, you can use "Browse" button.

Read text in images:

- 1. Access the link https://azure.microsoft.com/en-gb/services/cognitive-services/computer-vision/
- 2. Go to the section "Read text in images" (you can search for this string).
- 3. Around the section, you will find a Textbox containing text "Image URL" beside "Submit" button for you to upload the image that you want to analyze. Enter the following link there: https://cdn4.explainthatstuff.com/ocr-a-font-sample.png and click "Submit".
- 4. Feel free to experiment by finding other images containing similar images and enter the image link and 'Submit'. If your image is in the local machine, you can use "Browse" button.

Read handwritten text from images

- Access the link https://azure.microsoft.com/en-gb/services/cognitive-services/computer-vision/
- 2. Go to the section "Preview: Read handwritten text from images" (you can search for this string).
- 3. Around the section, you will find a Textbox containing text "Image URL" beside "Submit" button for you to upload the image that you want to analyze. Enter the following link there:
 - https://www.researchgate.net/profile/Chawki_Djeddi/publication/285582907/figure/fig8/A S:310221227479041@1450973912231/Sample-handwritten-text-from-CVL-Database.pn g and click "Submit".
- 4. Feel free to experiment by finding other images containing similar images and enter the image link and 'Submit'. If your image is in the local machine, you can use "Browse" button.

Celebrity faces recognition:

- Access the link
 https://azure.microsoft.com/en-gb/services/cognitive-services/computer-vision/
- 2. Go to the section "Recognise celebrities and landmarks" (you can search for this string).
- 3. Around the section, you will find a Textbox containing text "Image URL" beside "Submit" button for you to upload the image that you want to analyze. Enter the following link there:
 - https://m.media-amazon.com/images/M/MV5BNTk1OTUxMzIzMV5BMI5BanBnXkFtZTcwMzMxMjI0Nw@@._V1_.jpg and click "Submit".
- 4. Feel free to experiment by finding other images containing similar images and enter the image link and 'Submit'. If your image is in the local machine, you can use "Browse" button.

Face Verification:

- Access the link https://azure.microsoft.com/en-in/services/cognitive-services/face/
- 2. Go to the section "Face verification" (you can search for this string).
- 3. Around the section, you will find a Textbox containing text "Image URL" beside the "Submit" button for you to upload the image that you want to analyze. In this case, you'll enter two images, because you are comparing faces. Enter the following link there:

- a. For image1:
 https://ksassets.timeincuk.net/wp/uploads/sites/46/2016/07/leonardo-dicaprio-920
 x518.jpg and click "Submit".
- b. For image2: https://akns-images.eonline.com/eol_images/Entire_Site/20080924/300.dane.gre ysanatomy.092408.jpg
- 4. Feel free to experiment by finding other images containing similar images and enter the image link and 'Submit'. If your image is in the local machine, you can use "Browse" button.

Face detection

- 1. Access the link https://azure.microsoft.com/en-in/services/cognitive-services/face/
- Go to the section "Recognise celebrities and landmarks" (you can search for this string).
- 3. Around the section, you will find a Textbox containing text "Image URL" beside the "Submit" button for you to upload the image that you want to analyze. Enter the following link there:

 https://d23ipcd5miwp4q.cloudfront.net/wp-content/uploads/2016/04/Grou-Sefies-Bollywo
 - https://d23ipcd5miwp4q.cloudfront.net/wp-content/uploads/2016/04/Grou-Sefies-Bollywood.jpg and click "Submit".
- 4. Feel free to experiment by finding other images containing similar images and enter the image link and 'Submit'. If your image is in the local machine, you can use "Browse" button.

Emotion Recognition:

Tears alone don't reflect sadness?

- 1. Access the link https://azure.microsoft.com/en-in/services/cognitive-services/face/
- 2. Go to the section "Emotion recognition" (you can search for this string).
- 3. Around the section, you will find a Textbox containing text "Image URL" beside "Submit" button for you to upload the image that you want to analyze. Enter the following link there: https://i.ytimg.com/vi/UkIrOgYdsTg/hqdefault.jpg and click "Submit". Happy with the result? Let's try the next http://wirally.com/wp-content/uploads/2017/03/3-sad-song.jpg .Does the result good?
- 4. Feel free to experiment by finding other images containing similar images and enter the image link and 'Submit'. If your image is in the local machine, you can use "Browse" button.

Speech to text:

- 1. Access the link https://azure.microsoft.com/en-gb/services/cognitive-services/speech-to-text/
- 2. Click on "Start Recording" and speak any sentence, and see the speech getting translated.