1. Download python 3.7 or above. Download Pycharm, PIP is within the package already
2. Cmd Install packages:
   1. pip install numpy
   2. pip install pandas
   3. pip install tensorflow, keras
   4. pip install pillow
3. Run the script

Firstly, use your terminal (Windows Powershell) to step into the working directory.

cd directory

ls

* 1. Training mode

python main.py -m train

The directory has already contain training data and a trained model with these data, to augment/retrain the model, drag image files(.png) into the correspond folders inside directory dataset/train, (i.e. dataset/train/true or dataset/train/false). Then, type the above instruction, the script will re-train the model of a CNN and auto-save the model into the model folder.

* 1. Test mode

python main.py -m test

Running the test mode will load the model in the model folder and predict all image files in directory dataset/test, to test your uploaded images, drag test files into folder dataset/test, since this is a prediction process, there is no need to pre-classify images.

After running test mode, the result will be saved as a csv file in the working directory, there are 3 columns of outcome.csv, [image file name, score, prediction], where score is the prediction score, and prediction is a boolean value determined by score ?> 0.5