## **README**

## Part 1

Implemented in [131.m] and can be run in MATLAB. Takes input H and  $\eta$ .

## Part 2

Implemented in <code>main.py</code> and can be run using <code>python3</code> (also requires packages <code>cv2</code>, <code>tqdm</code>, <code>numpy</code>, <code>scipy</code>, <code>mtplotlib</code>). Change location of training images.

## Part 2 - Competition

Implemented in main\_competition.py and can be similarly run as **Part 2**,
also requires changing location of testing images.

The final results are noted in <code>comptetion\_results.txt</code> and (not so optimum results due to lack of time to run more epochs until overfitting) using convolutional neural networks are in <code>competition\_results\_2.txt</code>