EASY TRANSLATION FOR THE BRAILLE ALPHABET

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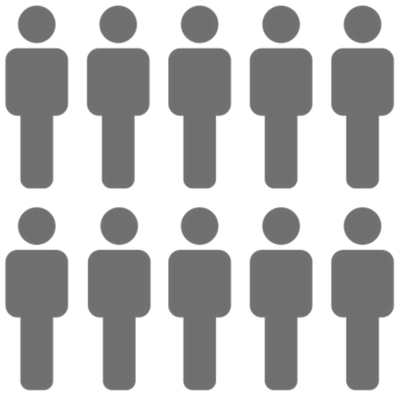
2020

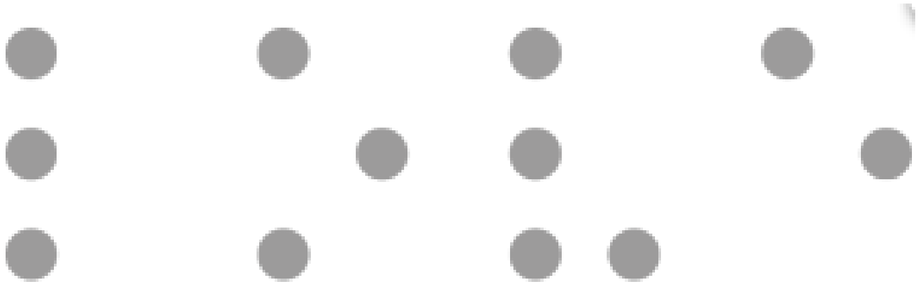
BLANCA DE OCHOA

285 M



USING DEEP LEARNING

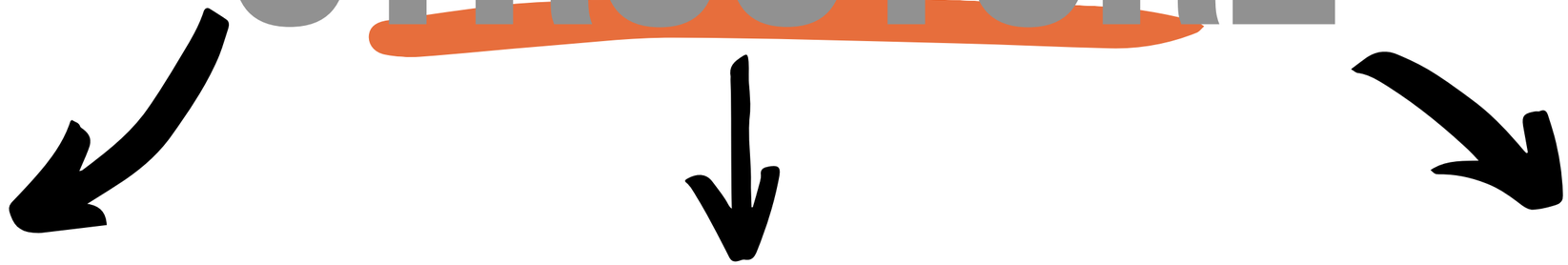
FROM THIS



TO THIS

LOVE

PROJECT STRUCTURE

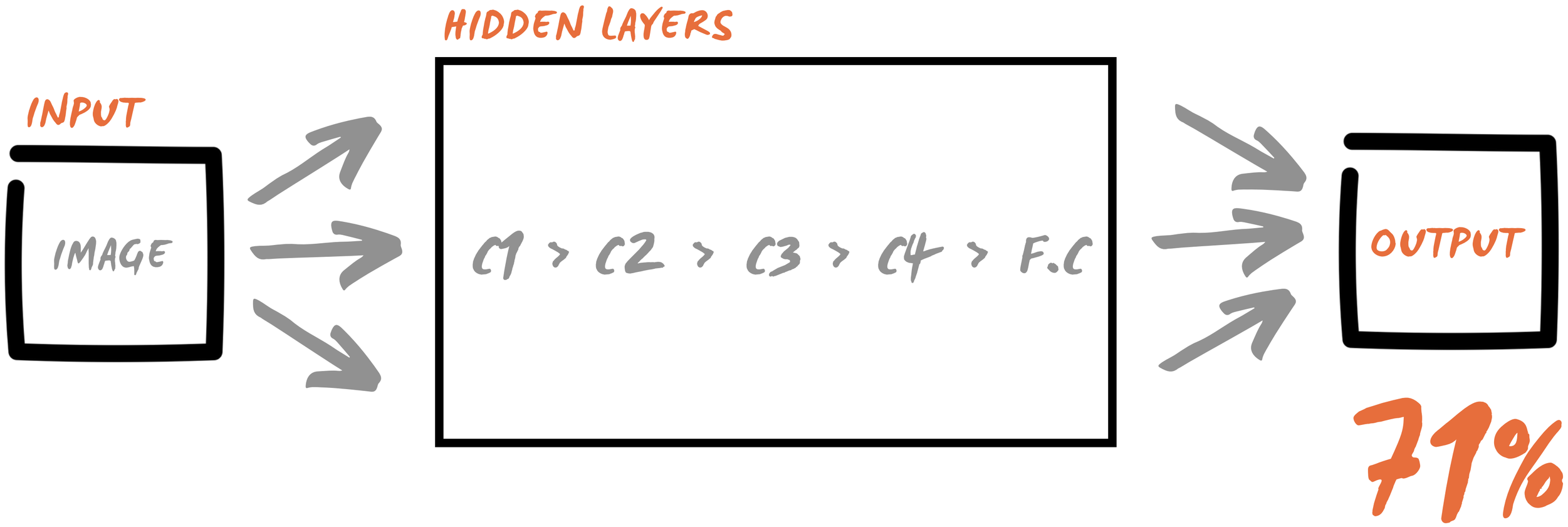


01 TRAINING THE MODEL

02 PREDICT CHARACTERS

03 PREDICT WORDS

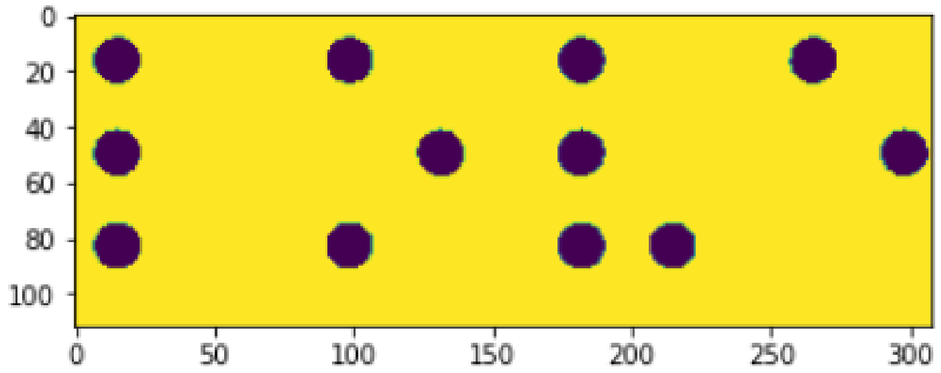
TRAIN THE MODEL

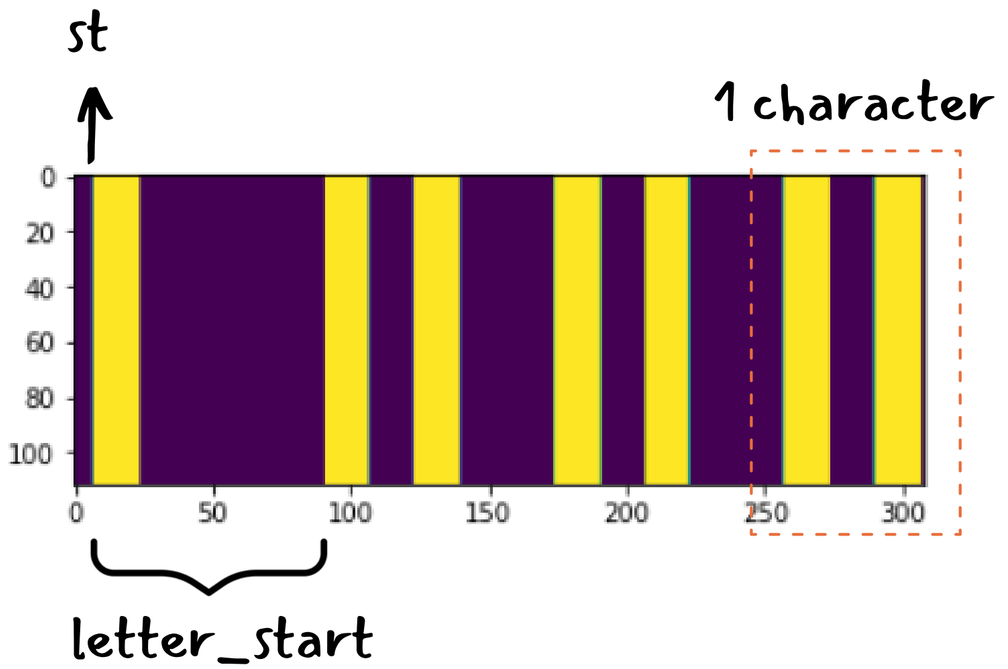


PREDICT CHARACTERS

* Img size → THE SIZE HAS TO BE 28X28
* Grayscale → FROM 3 CHANNELS (RGB), TO 1 CHANNEL
* Reshape 1./255 → SO VALUES ARE INBETWEEN 0 AND 1

PREDICT WORDS





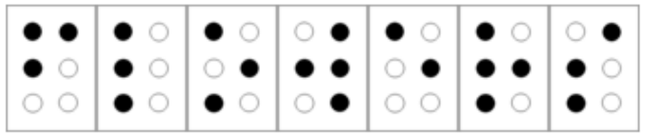

```
sep_letters = []

arr = np.array(image_original)
for st in letter_start:
    left = int(st-thick_col/2)
    left = left if left >= 0 else 0
    right = int(st+dist_mean+thick_col)
    right = right if right <= arr.shape[1] else arr.shape[1]
    sep_letters.append(arr[:,left:right])
```

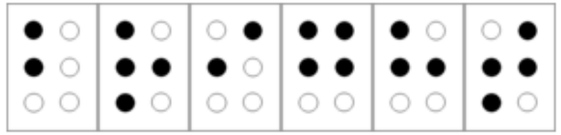
* Transform all the img values into 0 or 1

WIN THIS

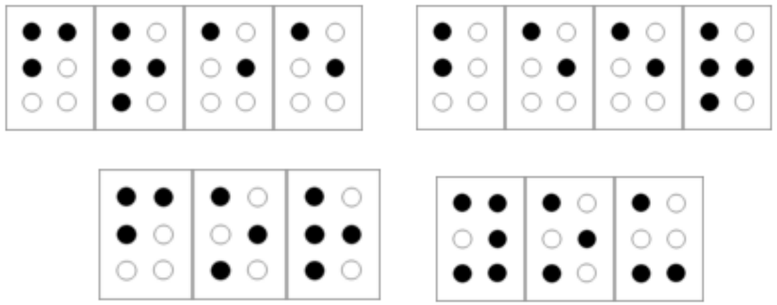
LETS ~~PLAY A~~ GAME!



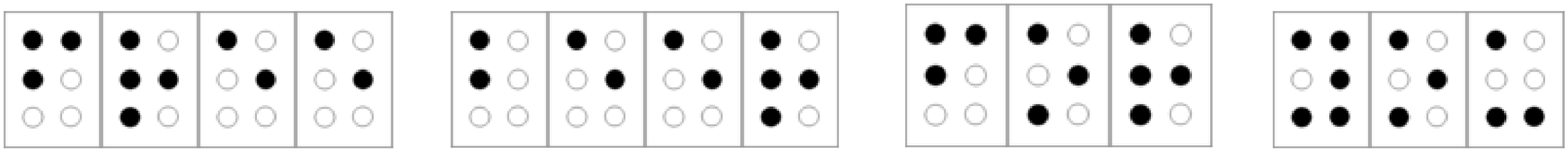
FLOWERS



BRIGHT



?



FREE BEER FOR YOU !

IMPROVEMENT

01 MODEL THAT CAN PREDICT ANY PICTURE ...

02 CREATE AN API FOR EASY PREDICTIONS ...

THANKS FOR LISTENING.