Model: "sequential"

| Layer (type) | Output Shape | Param # |
|------------------------------------|---------------------|---------|
| conv2d (Conv2D) | (None, 62, 62, 64) | 1792 |
| max_pooling2d (MaxPooling2D) | (None, 31, 31, 64) | Θ |
| conv2d_1 (Conv2D) | (None, 29, 29, 128) | 73856 |
| max_pooling2d_1 (MaxPooling 2D) | (None, 14, 14, 128) | Θ |
| dropout (Dropout) | (None, 14, 14, 128) | Θ |
| conv2d_2 (Conv2D) | (None, 12, 12, 64) | 73792 |
| max_pooling2d_2 (MaxPooling 2D) | (None, 6, 6, 64) | Θ |
| flatten (Flatten) | (None, 2304) | Θ |
| dropout_1 (Dropout) | (None, 2304) | Θ |
| dense (Dense) | (None, 7) | 16135 |
| | | |

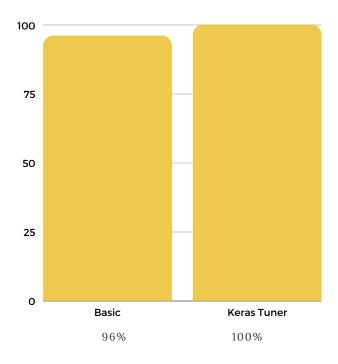
Total params: 165,575 Trainable params: 165,575 Non-trainable params: 0

Model: "sequential"

| Layer (type) | Output Shape | Param # |
|--|--------------------|---------|
| conv2d (Conv2D) | (None, 62, 62, 16) | 448 |
| <pre>max_pooling2d (MaxPooling2D)</pre> | (None, 31, 31, 16) | 0 |
| conv2d_1 (Conv2D) | (None, 29, 29, 32) | 4640 |
| max_pooling2d_1 (MaxPooling 2D) | (None, 14, 14, 32) | Θ |
| dropout (Dropout) | (None, 14, 14, 32) | Θ |
| conv2d_2 (Conv2D) | (None, 12, 12, 64) | 18496 |
| max_pooling2d_2 (MaxPooling 2D) | (None, 6, 6, 64) | Θ |
| flatten (Flatten) | (None, 2304) | Θ |
| dropout_1 (Dropout) | (None, 2304) | Θ |
| dense (Dense) | (None, 7) | 16135 |

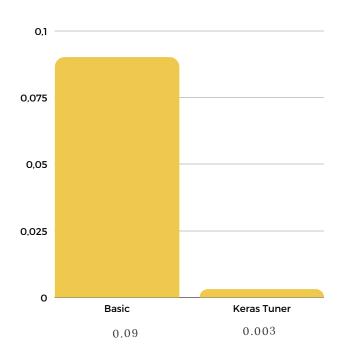
Total params: 39,719 Trainable params: 39,719 Non-trainable params: 0

BASIC MODEL



ACCURACY

KERAS TUNER MODEL



LOSS

With the data obtained, we can observe that thanks to using Keras Tuner we considerably improve the results of our classifier, at the cost of spending time doing the grid search to get the optimal parameters.