



Processamento e Análise de Imagens

Antes:: 23 classes

Treino (35 épocas)



- Acurácia = 88%

- Validação = 38%

Teste

- Total = 4002 | Acerto = 1590

Acurácia = 39,7%

Agora :: 10 classes

Treino (18 épocas)

- Total = 7457 => 80% = 5966

- Acurácia = 84%

- Validação = 55%

Teste

- Total = 2728 | Acerto = 1547

Acurácia = 56,7%





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Computação Paralela

Treino com 20% = 1492 das imagens, e 12 épocas

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CPU

11th Gen Intel(R) Core(TM) i5-1135G7 @ 2.40GHz

Velocidade base: 2,42 GHz

Sockets: 1

Núcleos: 4

Processadores lógicos: 8

Cache L1: 320 KB

Cache L2: 5,0 MB

Cache L3: 8,0 MB
```

```
GPU

Attached GPUs : 1

GPU 00000000:00:04.0

Product Name : Tesla T4

Product Brand : NVIDIA

Product Architecture : Turing

GPU compute capability: (7, 5)

GPU total number of SMs: 40

Total CUDA Cores: 2560
```

```
tf.config.threading.set_intra_op_parallelism_threads(4)
tf.config.threading.set_inter_op_parallelism_threads(4)
```







Avaliação de Desempenho

Arquitetura	Tempo de Execução	Ganho	Eficiência
1 thread	1827 segs	-	-
2 threads	1179 segs	1,55	38,7%
4 threads	941 segs	1,94	48,5%
8 threads	853 segs	2,14	53,5%
GPU	87 seg	21	-











