Report for “The Not-Hogdog Classifier”

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**1. Introduction**

We have implemented a multilayer perceptron (MLP) binary classifier that classifies images into 2 classes: “laptop” or “not laptop”, depending on whether a laptop is present in those images.

In order to do that, we’ve had to create our own dataset of images and our own model

**2. Procedure**

* Creating our own dataset of images

Gathering a set of images large enough to train our model. We downloaded more images than we needed, keeping in mind that we would have to filter out manually images that wouldn’t show a clear laptop.

After the selection, we ended up having 1400 images: 500 to train each class, plus 200 for testing each class as well.

* Designing our own model:

**3. Results**

Epochs: 25

Laptops: correct: 176, incorrect: 20

Not laptops: correct: 176, incorrect: 23

Epochs: 50

Laptops: correct: 165, incorrect: 31 ¿?

Not laptops: correct: 190, incorrect: 8

Epochs: 75

Laptops: correct: 165, incorrect: 35

Not laptops: correct: 187, incorrect: 12

Epochs: 100

Laptops: correct: 174, incorrect: 25

Not laptops: correct: 189, incorrect: 10