

## Coral TPU - Startup Guide

TA tutorial - <https://youtu.be/jlWukY4R64A>

Youtube Tutorial- <https://www.youtube.com/watch?v=sHwxd1B-hqo>

### 1. Install a compatible version of Python

As of the latest updates, PyCoral (the Python API for Coral devices) primarily supports Python versions 3.5 through 3.9.

Version 3.9.13

Download [Windows installer \(64-bit\)](#)

Download [Windows installer \(32-bit\)](#)

### 2. Now follow this instructions

<https://coral.ai/docs/accelerator/get-started/#requirements>

For Windows use "py -3.9" instead of python3

I recommend using Git for Windows <https://gitforwindows.org/>

### 3. If found an error with Numpy, install a compatible Numpy version.

pip uninstall numpy

pip install numpy==1.21.6

### Example to do your own model: Tensor 2.8

<https://colab.research.google.com/drive/1Ltiv2zr3pfrCCq3DiMJYTISf2QRd4wSR?usp=sharing>

### To run inferences

Copy model (.tflite), labels (.txt), test images(.jpg) to a known location inside ...\\coral\\pycoral (ex. "flower" folder). You can download the images from

<https://www.kaggle.com/datasets/imspars/flowers-dataset?resource=download>

Then open the Git Bash terminal and run the following:

```
$ cd coral
```

```
$ cd pycoral
```

```
$ py -3.9 examples/classify_image.py \  
--model flower/mobilenet_v2_1.0_224_quant_edgetpu.tflite \  
--labels flower/flower_labels.txt \  
--input flower/Image_18.jpg
```

```
MINGW64:/c/Users/diego/col X + v
Note: The first inference on Edge TPU is slow because it includes loading the
model into Edge TPU memory.
78.9ms
9.9ms
10.0ms
9.9ms
9.9ms
-----RESULTS-----
dandelion: 0.99609

diego@Laptop_Diego MINGW64 ~/coral/pycoral (master)
$ py -3.9 examples/classify_image.py --model flower/mobilenet_v2_1.0_224_quant_edgetpu.tflite --labels flower/flower_labels.txt --input flower/Image_8.jpg
----INFERENCE TIME----
Note: The first inference on Edge TPU is slow because it includes loading the
model into Edge TPU memory.
79.1ms
10.0ms
9.9ms
10.1ms
10.1ms
-----RESULTS-----
daisy: 0.99609

diego@Laptop_Diego MINGW64 ~/coral/pycoral (master)
$ py -3.9 examples/classify_image.py --model flower/mobilenet_v2_1.0_224_quant_edgetpu.tflite --labels flower/flower_labels.txt --input flower/Image_18.jpg
----INFERENCE TIME----
Note: The first inference on Edge TPU is slow because it includes loading the
model into Edge TPU memory.
78.9ms
10.4ms
10.4ms
10.0ms
10.0ms
-----RESULTS-----
roses: 0.99609
```