

Controlling Tello with Python

Before we make Tello do some crazy tasks like object tracking and autonomous following, we need to ensure we have all the inter-compatible libraries required installed.

Python 3.7.9 (tested and working. Feel free to try out other versions)

<https://www.python.org/downloads/release/python-379/>

If you have multiple python versions installed, you can do either of the things.

You can create a new virtual environment using conda or venv with base interpreter as python 3.7.9 and activate it every time before you play around.

<https://www.geeksforgeeks.org/set-up-virtual-environment-for-python-using-an-conda/>

<https://python.land/virtual-environments/virtualenv>

You can change default python version to 3.7.9

<https://stackoverflow.com/questions/5087831/how-should-i-set-default-python-version-in-windows>

Opencv == 4.5

Mediapipe

Matplotlib

Numpy

pygame

DjiTelloPy

DJI Tello drone python interface using the official Tello EDU SDK with implementation of all tello commands, easily retrieve a video stream, receive and parse state packets, control a swarm of drones

<https://github.com/damiafuentes/DJITelloPy>

There are a few useful commands we will be using throughout the labs.

`mytello = Tello()` creating an object of Tello

`mytello.connect()` connecting to our tello object

`mytello.streamoff()` , `mytello.streamon()` to start video streaming

`mytello.get_battery()` get information about battery

`mytello.send_rc_control(left_right_velocity, for_back_velocity,`

```
        up_down_velocity, yaw_velocity) to move the drone around in 3d space.  
mytello.takeoff()  
mytello.land()
```

Try running the simple example provided in their repository.

For controlling using keypad, try running:

<https://github.com/damiafuentes/DJITelloPy/blob/master/examples/manual-control-pygame.py>