
Synexens Python3 Instructions

Date	Corresponding SDK version	Description	Author
20221214	v1.0.0.0	Initial release	gjl
20240112	v4.1.1.0	Formatting	ysy
20240229	v4.1.3.0	Content Updates	gjl
20250427	v4.2.4.0	Content Updates	gjl

Directory

Synexens Python3 Instructions	1
1. Overview	3
2. Environmental dependency	3
3. Code structure description	3
3.1、SynexensPythonSDK.py	3
3.2、SYPythonDataDefine.py	3
3.3、SynexensTest.py	3
4. Steps to use	4
5. Other Platforms	4
Disclaimer	5

1. Overview

Supported devices: CS20 Single Band, CS20 Dual Band, CS30 Single Band, CS30 Dual Band,cs20p,cs40,cs40pro

Support system: windows, Ubuntu

2. Environmental dependency

Python 3.9 or above

Dependent modules: ctypes, numpy, opencv

3. Code structure description

There are 3 python code files in total

3.1、SynexensPythonSDK.py

The file uses CTYPES to load external dynamic libraries and re-encapsulates the interface of the C++ dynamic libraries.

3.2、SYPythonDataDefine.py

This file contains the enumerations and structs required in the SDK

3.3、SynexensTest.py

The SDK demo contains basic functions, and you can refer to the C++ SDK demo for specific usage.

The key value of OpenCV is different in Windows and Ubuntu, and the

corresponding key can be modified according to the system

Values are annotated in SynexensTest.

4. Steps to use

Once you have downloaded the PythonSDK to your local computer, extract it.

Contains a requirements.txt file inside. The required dependencies can be installed via `python install -r requirements.txt`.

Executed via Python `SynexensTest.py`.

5. Other Platforms

In Linux, you also need to put the so folder in the environment variable of the terminal. Here's how

Add the environment variable for the current user's current terminal - temporary

```
export LD_LIBRARY_PATH=/home/{username}/... #.so file path
```

Add the environment variable for the current user to modify the `~/.bashrc` file, and at the end of it, add the environment variable

```
vim ~/.bashrc
```

```
export LD_LIBRARY_PATH=$LD_LIBRARY_PATH:/home/{username}/...
```

Make it work:

```
source ~/.bashrc
```

Then type `python SynexensTest.py` in the terminal to run.

Note: This program is only a demo of the SDK in the Python development language

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