Rust Stream and Frame Processing Powered by opencv

中文版在[这里](这里)

Introduction

A tool that can detect body, face, QR Code and take photo. The stream or frame sources from video, camera or pictures.
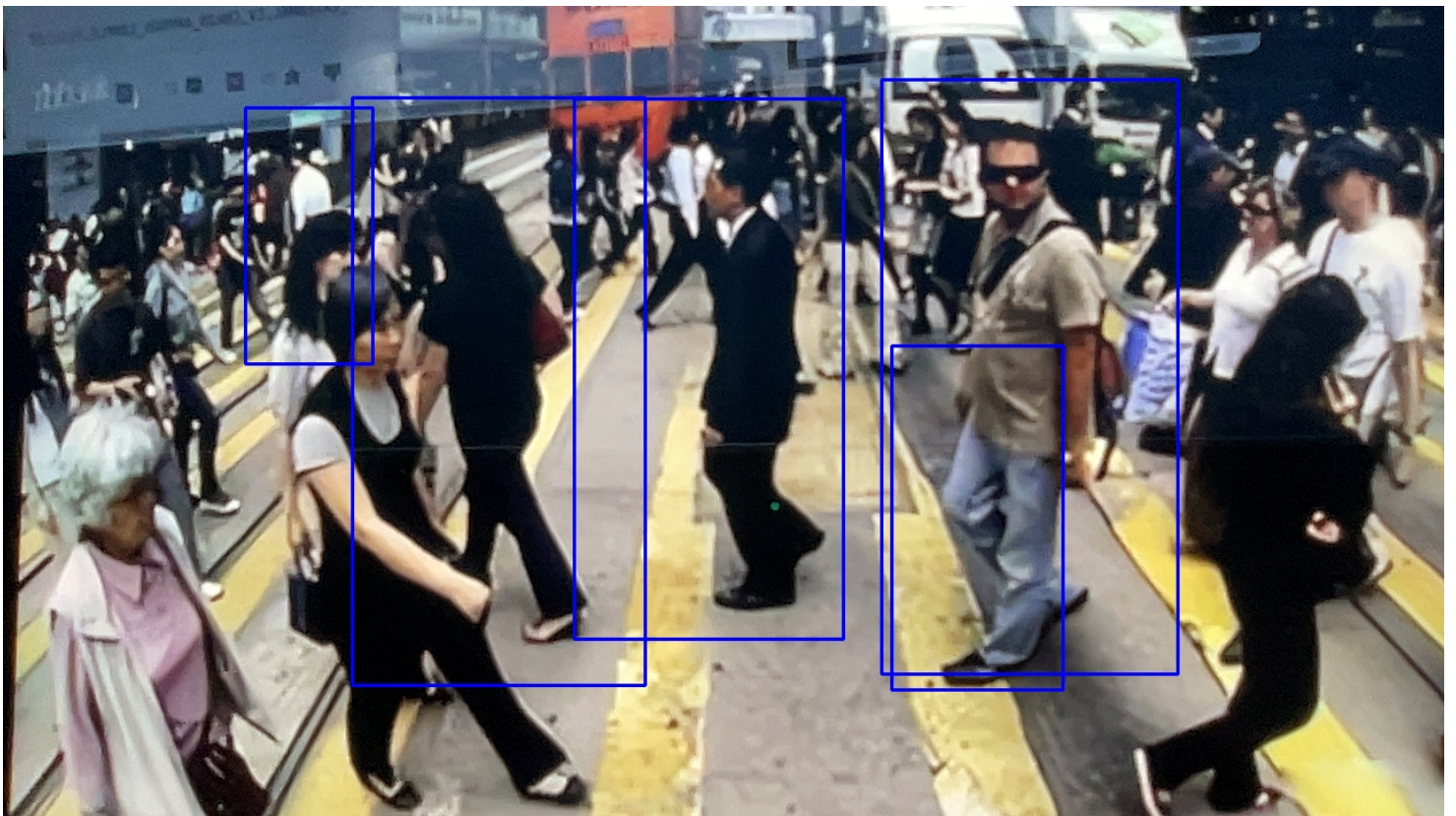TODO :

- ✅ Body Detection
- ✅ Face Detection
- ✅ Moving Object Detection
- ✅ Support for single frame
- ✅ QR Code Detection and Decode

Preview

Requirements

- Install opencv

Macos:

```
brew install opencv
```

Linux:

1. Download opencv-4.x.x source code in https://opencv.org/releases/
2. unzip it to anywhere you want
3. `cd opencv-4.x.x`
4. `mkdir build && cd build`
5. `cmake -D WITH_TBB=ON -D WITH_EIGEN=ON -D OPENCV_GENERATE_PKGCONFIG=ON -D BUILD_DOCS=ON -D BUILD_TESTS=OFF -D BUILD_PERF_TESTS=OFF`
6. `make -j8`
7. `make install`
8. `sudo -i vim /etc/ld.so.conf.d/opencv.conf` and then add `/usr/local/lib` in it
9. `sudo echo 'PKG_CONFIG_PATH=$PKG_CONFIG_PATH:/usr/local/lib/pkgconfig' >> /etc/bash.bashrc`

`sudo echo 'export PKG_CONFIG_PATH' >> /etc/bash.bashrc`

Usage

- Clone this repository
  `git clone https://github.com/BinciLuo/RustWebCam.git`
  `cd RustWebCam`
- Build
  `cargo build`
- Run
  `cargo run`
  It wiil create folders `pics` , `pics/Camera` , `pic/Capture` if they don't exist.

TroubleShooting

Macos

Temporarily None

Linux

`openssl`

- Message: `failed to run custom build command for openssl-sys v0.9.60`
- Solution: `sudo apt install libssl-dev`

`llvm`

- Message: `Could not execute 'llvm-config' one or more times`
- Solution: `sudo apt install llvm clang libclang-dev`

`videoio compile error`

- Message: `function or associated item not found in 'VideoCapture'`
- Solution: OpenCV version too old. first exec `sudo apt-get purge *libopencv* && sudo apt-get autoremove && sudo apt-get autoclean` to uninstall old opencv and then install it again following tips in Requirements.

`gtk`

- Message: `Failed to load module acnberra-gtk-module`
- Solution: `sudo apt install libcanberra-gtk-moudle`

`'limits' file not found`

- Message: `'limits file not found'`
- Soulution `sudo apt install libstdc++-12-dev`