Face Detectin Demo

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build FaceDetector and demo client with opencv haar and libzmq

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1. build opencv from souce code
2. edit opencv/CMakeLists.txt set OpenCV_DIR to your hosts (`set(OpenCV_DIR C:/Users/lzbgt/work/github.com/opencv/build/install/x64/vc16/lib)`)
3. build

```
./build.sh opencv
```

build artifacts: install/FaceDetector.exe, install/ClientDemo.exe

run

FaceDetector.exe [--show]

```
--show: openup live camera GUI anchored with detected face regions
```

communication model

```
flowchart LR
  huamnan_face --> camera
```

```
camera --> opencv_haar
opencv_haar --> zmq_pub
zmq_pub <--> zmq_sub_1
zmq_pub <--> zmq_sub_..
zmq_pub <--> zmq_sub_n
```

zmq protocol spec

pub/sub model with json payload:

```
{"event": str =  "face_on|face_off", cnt:int = NUM_OF_FACES_IN_VISION}
```

3rd-party library and references

[1] opencv

[2] libzmq

[3] zmq via CSharp