

OpenCV + Visual Studio

OpenCV

: <http://opencv.org/>

/opencv/opencv/build/x86/

x64, x86 가 , 64 , 32 , 32

vc11, vc12 가 가

vc11 Visual Studio 2012

vc12 Visual Studio 2013

. C++

가 → C/C++ → 가 opencv/opencv/build/include

가 opencv/opencv/build/x86/vc11/lib

x86 32 , vc11 2013

가 opencvts300.lib opencvworld300.lib 가

, opencv 3.0

main.cpp 가 . opencv.jpg .

```
#include <opencv\cv.h>
#include <opencv\highgui.h>

int main(void )
{
    char* filePath = "C:\\
    \\OpenCV\\ConsoleApplication3\\Debug\\opencv.jpg" ;

    IplImage* image = cvLoadImage(filePath);

    cvShowImage( "OpenCV", image);
    cvWaitKey(0);

    cvReleaseImage(&image);
    return 0;
}
```

<sxh cpp> rectangle(image, Point(0,0), Point(w, h), Scalar(0,0,255), -1, 8); </sxh>

, Rect , Scalar .

<sxh cpp> void drawRect(Mat* mat, Rect rt, Scalar sc){

```
//int h = mat->size().height;
int w = mat->size().width;
int c = mat->channels();

cout << "x, y, width, height " << rt.x
<< ":" << rt.y << ":" << rt.width << ":" << rt.height << endl ;

for (int i = rt.x ; i < rt.width ; i++){
    for (int j= rt.y; j< rt.height; j++){
        for (int k=0; k < c; k++){
```

```

        mat->data[j*w*c+i*c+k] = sc.val[k];
    }
}
}

```

} </sxh>

3

...

..

<sxh cpp> flip(image, image, 0); </sxh>

0, 1, -1

<sxh cpp> Mat flipData(Mat mat, int type){

```

int h = mat.size().height;
int w = mat.size().width;
int c = mat.channels();
Mat rst;
rst.create(Size(w,h),CV_8UC3);

for(int i = 0; i<h; i++){
    for (int j=0; j < w; j++){
        for (int k=0; k < c; k++){
            if (type == 0){
                rst.data[k+ c*j + c*w*(h-i-1)] = mat.data[k+ c*j + c*w*i];
            }else if (type == 1){
                rst.data[k+ c*(w-j-1) + c*w*i] = mat.data[k+ c*j + c*w*i];
            }else if (type == -1){
                rst.data[k+ c*(w-j-1) + c*w*(h-i-1)] = mat.data[k+ c*j +
c*w*i];
            }
        }
    }
}
return rst;

```

} </sxh>

```
<sxh cpp> addWeighted(mat, 0.5, bg, 0.5, 1, mat, -1); </sxh>
```

alpha

```
<sxh cpp> Mat composeMat(Mat mat, Mat bg){
```

```
int h = mat.size().height;
int w = mat.size().width;
int c = mat.channels();
Mat rst;
rst.create(Size(w,h),CV_8UC3);

for (int i =0 ; i < h*w*c; i++){
    rst.data[i] = mat.data[i]/2+bg.data[i]/2;
}

return rst;
```

```
} </sxh>
```

alpha

- [OpenCV](#)

From:

<https://jace.link/> - **Various Ways**

Permanent link:

<https://jace.link/open/opencv-visual-studio>

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