

Add-Ons

What are they?

**Basically?
Really awesome classes!**

<http://www.openframeworks.cc/documentation/>

Three Ways To Add Add-Ons

The Most Legit Way



PROJECT GENERATOR

Name: mySketch

<< CLICK TO CHANGE THE NAME

Path: /Users/alexsamuel/Documents/of_v0.8.0_osx_release/
apps/myApps

<< CLICK TO CHANGE THE DIRECTORY

Platforms: osx (xcode)

Addons:

<< CLICK TO SELECT ADDONS



GENERATE PROJECT

The image shows a software interface for managing OpenFrameworks (OFX) addons. It consists of two main windows and a central dialog box.

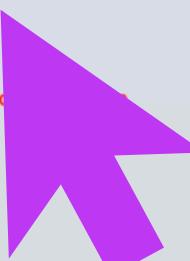
Left Window: A list of addons. The 'ofxOpenCv' checkbox is checked and highlighted with a large pink arrow pointing towards it. Other addons listed include: ofx3DModelLoader, ofxAssimpModelLoader, ofxGui, ofxKinect, ofxNetwork, ofxDsc, ofxImage, ofxVideo, ofxImageLoader, ofxGraphics, and ofxSettings.

Right Window: A list of addons. The 'ofxCv' checkbox is checked and highlighted with a pink arrow. Other addons listed include: ofxBlobTracker, ofxFaceTracker, ofxLibwebsockets, and ofxSpacebrew.

Central Dialog: A modal window titled "select core and non-core addons to add". It contains a list of checkboxes corresponding to the addons in the left window, all of which are currently checked.

Bottom Right: A black button labeled "<< BACK" in white text.

addons	Fly	emptyExample	addons.make
apps	myApps	exampleSketch	bin
CHANGELOG.md			config.make
CodeForArt			exampleSketch.xcodeproj
docs			Makefile
examples			openFrameworks-Info.plist
export			ProjectSettingsSig
INSTALL.md			src
libs			
LICENSE.md			
other			
projectGenerator_osx			
README.md			
scripts			



A screenshot of the Xcode IDE showing an open project named "exampleSketch.xcodeproj". The main window displays the file "testApp.cpp" with the following code:

```
#include "testApp.h"

//-
void testApp::setup(){

}

//-
void testApp::update(){

}

//-
void testApp::draw(){

}

//-
void testApp::keyPressed(int key){

}

//-
void testApp::keyReleased(int key){

}

//-
void testApp::mouseMoved(int x, int y ){

}

//-
void testApp::mouseDragged(int x, int y, int button){

}

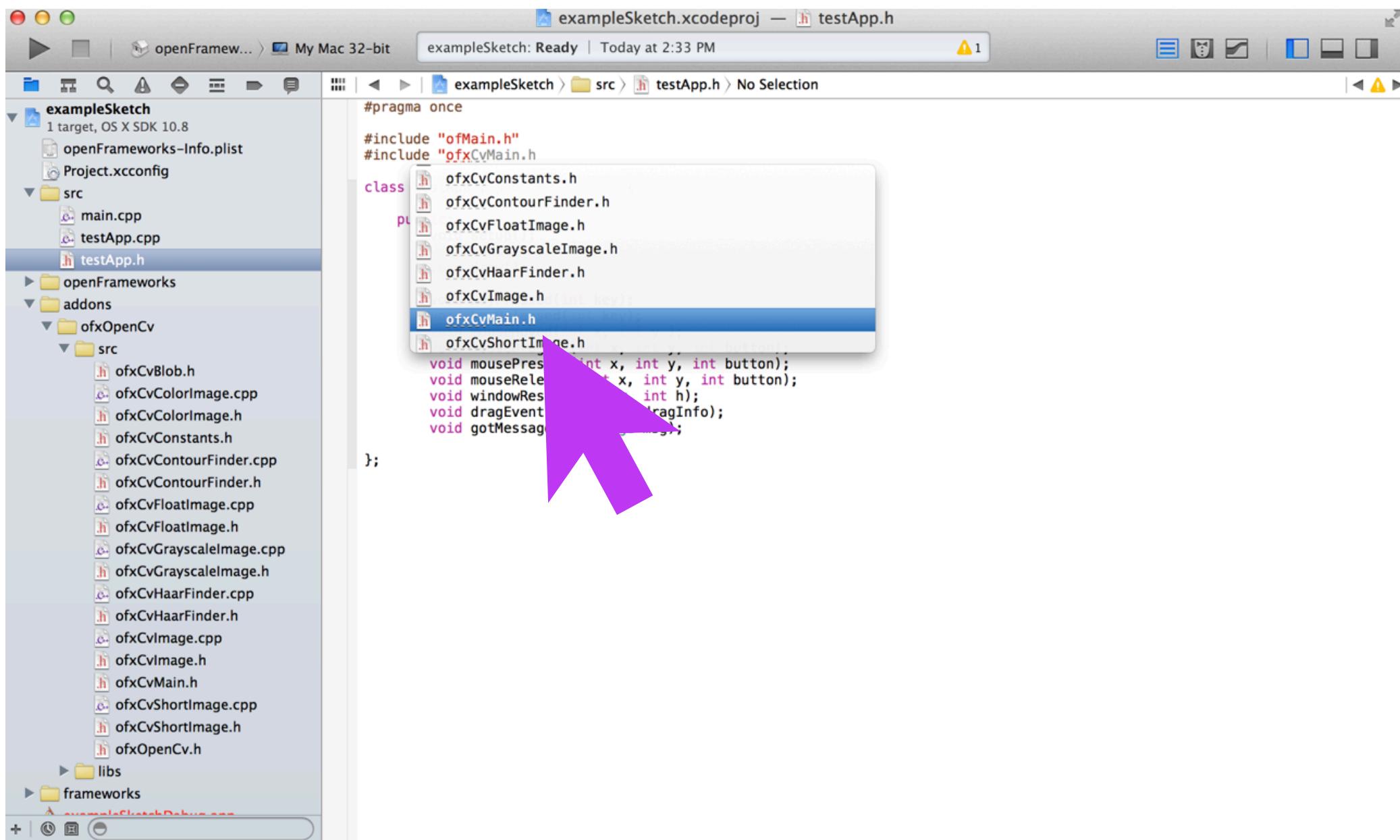
//-
void testApp::mousePressed(int x, int y, int button){

}

//-
void testApp::mouseReleased(int x, int y, int button){

}
```

The Xcode interface includes a toolbar at the top with standard icons like play, stop, and search. Below the toolbar is a status bar showing "exampleSketch: Ready | Today at 2:33 PM" and a warning icon with "1". The left sidebar shows the project structure with files like "main.cpp", "testApp.cpp", and "testApp.h" selected. The bottom of the screen has a toolbar with various icons.



A screenshot of the Xcode IDE interface. The title bar shows "exampleSketch.xcodeproj — testApp.h" and "exampleSketch: Ready | Today at 2:33 PM". A warning icon indicates 1 error.

The left sidebar displays the project structure:

- exampleSketch (target, OS X SDK 10.8)
 - openFrameworks-Info.plist
 - Project.xcconfig
- src
 - main.cpp
 - testApp.cpp
 - testApp.h (selected)
- openFrameworks
- addons
- ofxOpenCv
 - src
 - ofxCvBlob.h
 - ofxCvColorImage.cpp
 - ofxCvColorImage.h
 - ofxCvConstants.h
 - ofxCvContourFinder.cpp
 - ofxCvContourFinder.h
 - ofxCvFloatImage.cpp
 - ofxCvFloatImage.h
 - ofxCvGrayscaleImage.cpp
 - ofxCvGrayscaleImage.h
 - ofxCvHaarFinder.cpp
 - ofxCvHaarFinder.h
 - ofxCvImage.cpp
 - ofxCvImage.h
 - ofxCvMain.h
 - ofxCvShortImage.cpp
 - ofxCvShortImage.h
 - ofxCvOpenCv.h
- libs
- frameworks

The main editor area shows the content of `testApp.h`:

```
#pragma once

#include "ofMain.h"
#include "ofxCvMain.h"

class ofxCvConstants.h
ofxCvContourFinder.h
pt ofxCvFloatImage.h
ofxCvGrayscaleImage.h
ofxCvHaarFinder.h
ofxCvImage.h
ofxCvMain.h
ofxCvShortImage.h

void mousePress( int x, int y, int button);
void mouseRelease( int x, int y, int button);
void windowResized( int w, int h);
void dragEvent( const DragInfo& dragInfo);
void gotMessage( const Message& message);

};
```

A large purple arrow points from the bottom left towards the "ofxCvMain.h" item in the code completion dropdown menu.

exampleSketch.xcodeproj — testApp.h

Running exampleSketchDebug.app : exampleSketch Debug 2

exampleSketch 1 target, OS X SDK 10.8
openFrameworks-Info.plist
Project.xcconfig
src
main.cpp
testApp.cpp
testApp.h

```
#pragma once

#include "ofMain.h"
#include "ofxCvMain.h"

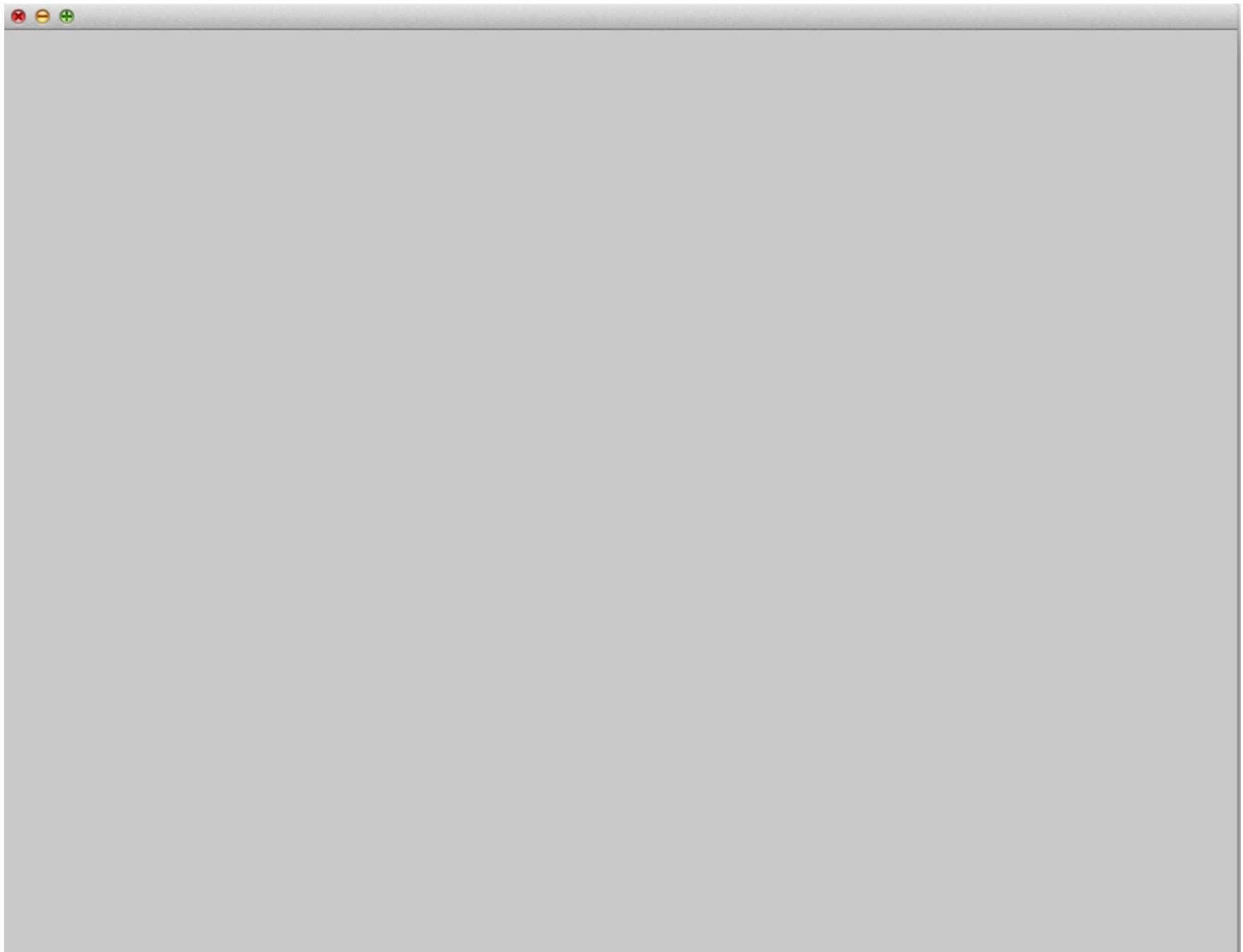
class testApp : public ofBaseApp{

public:
    void setup();
    void update();
    void draw();

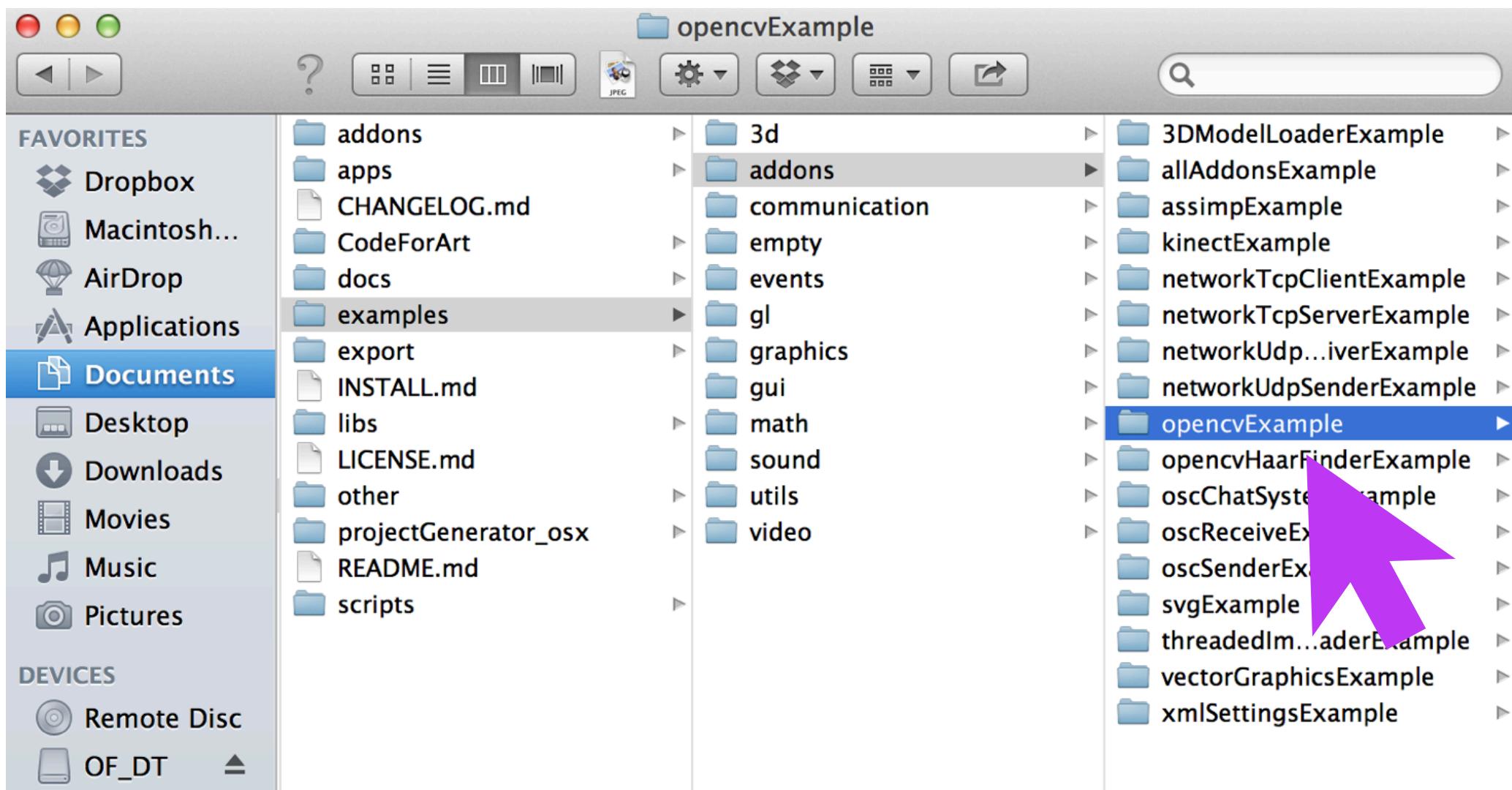
    void keyPressed(int key);
    void keyReleased(int key);
    void mouseMoved(int x, int y );
    void mouseDragged(int x, int y, int button);
    void mousePressed(int x, int y, int button);
    void mouseReleased(int x, int y, int button);
    void windowResized(int w, int h);
    void dragEvent(ofDragInfo dragInfo);
    void gotMessage(ofMessage msg);

};
```

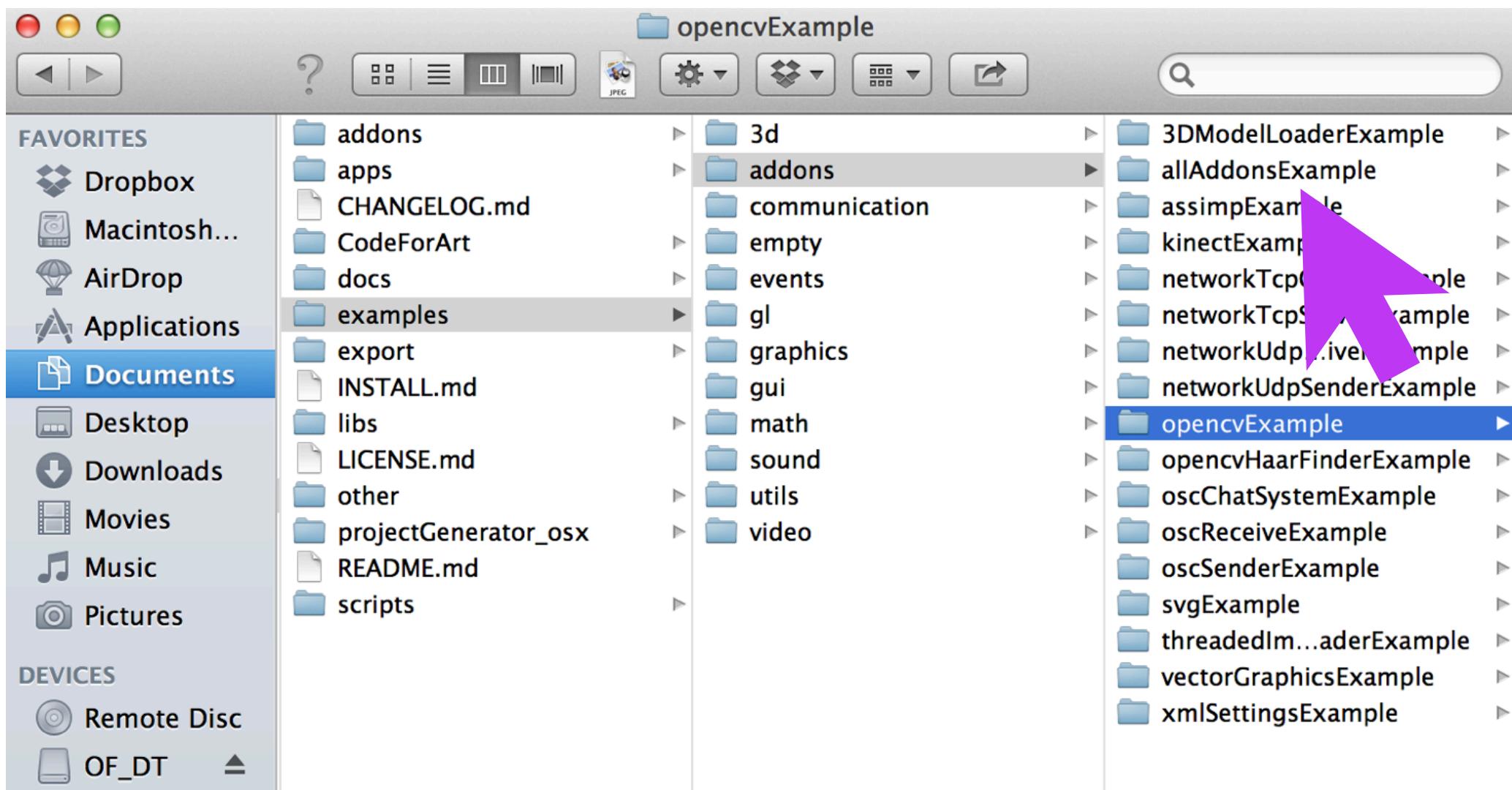
Build Succeeded

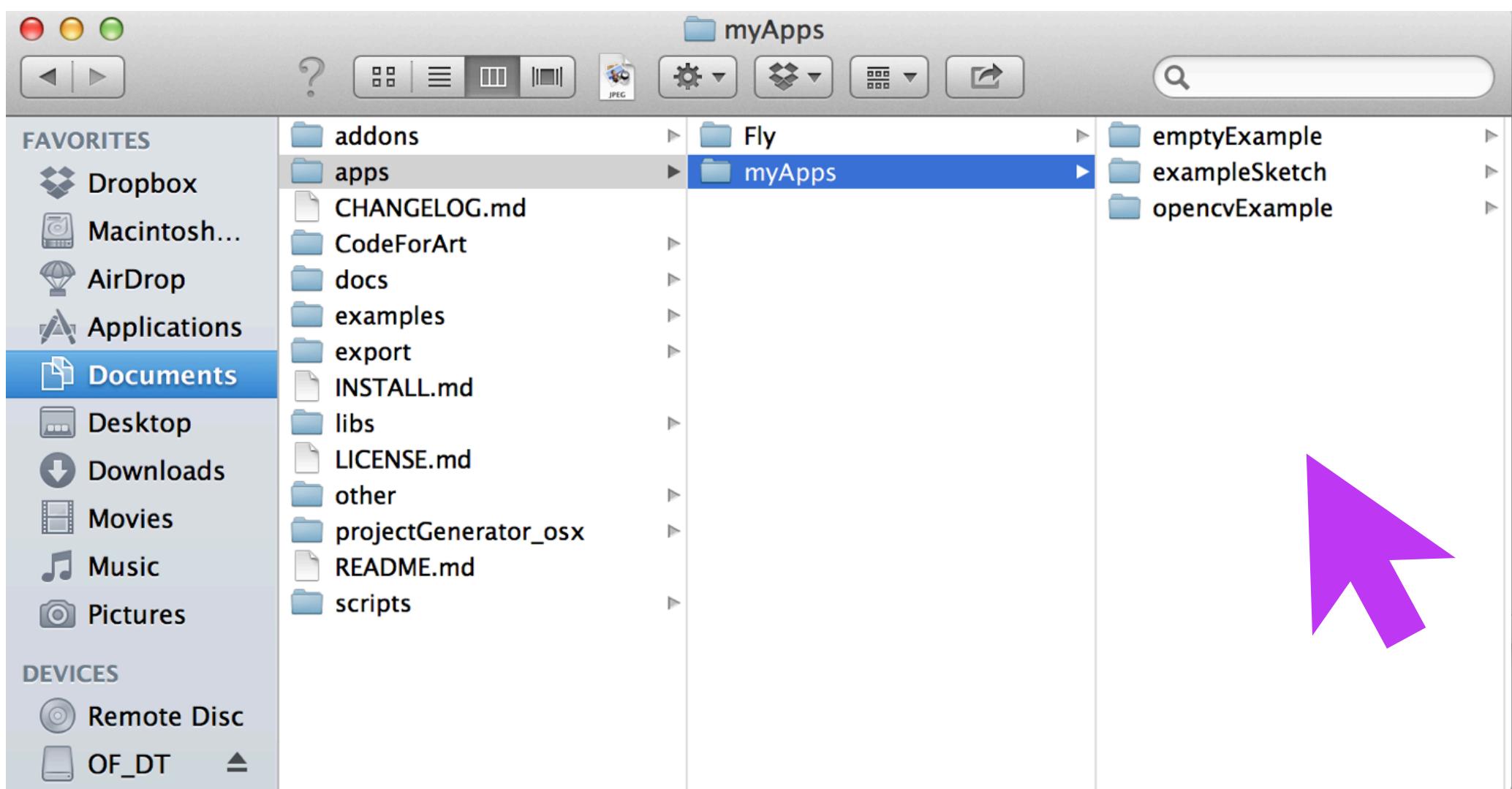


The Super Sneaky Way

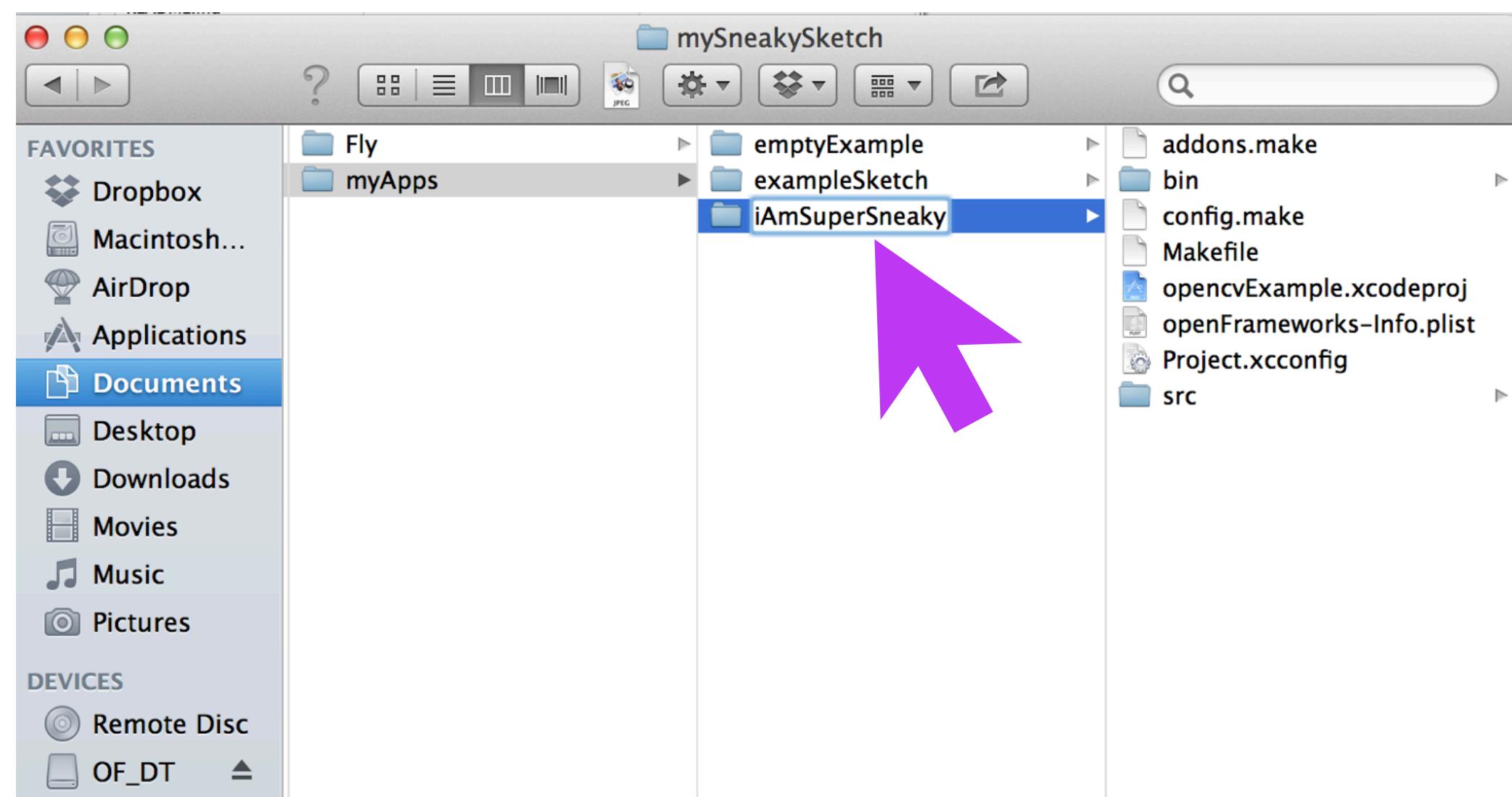


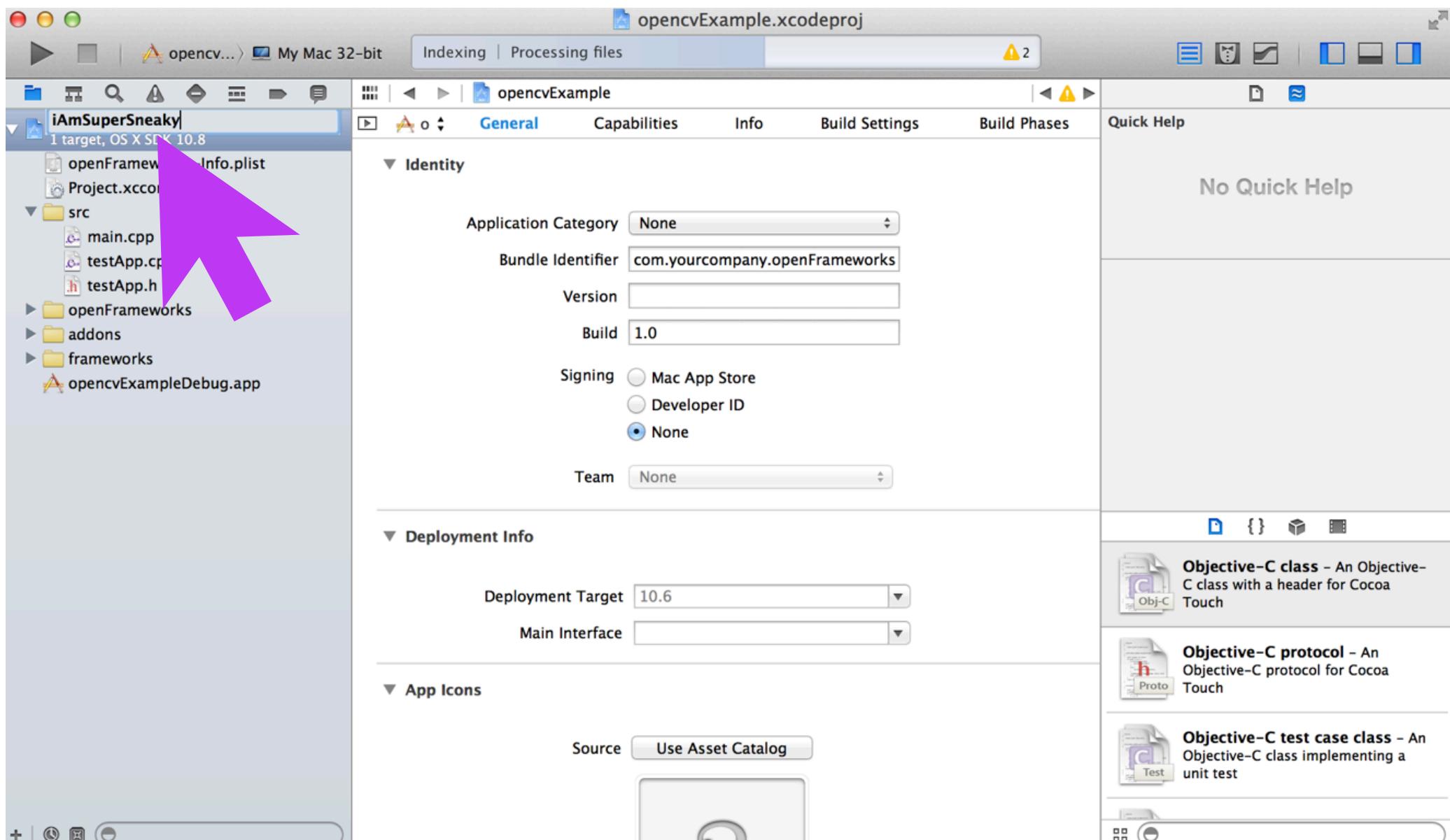
Copy





Paste





iAmSuperSneaky.xcodeproj — iAmSuperSneaky.xcodeproj

Indexing | Processing files No Issues

iAmSuperSneaky 1 target, OS X SDK 10.8

Rename project content items?

Current	Change
iAmSuperSneaky.xcodeproj	-
opencvExample	↳ iAmSuperSneaky
opencvExampleDebug Debug	↳ iAmSuperSneakyDebug Debug
opencvExample Release	↳ iAmSuperSneaky Release

Deployment Info

Deployment Target: 10.0

Don't Rename Rename

Main Interface:

App Icons

Source Use Asset Catalog

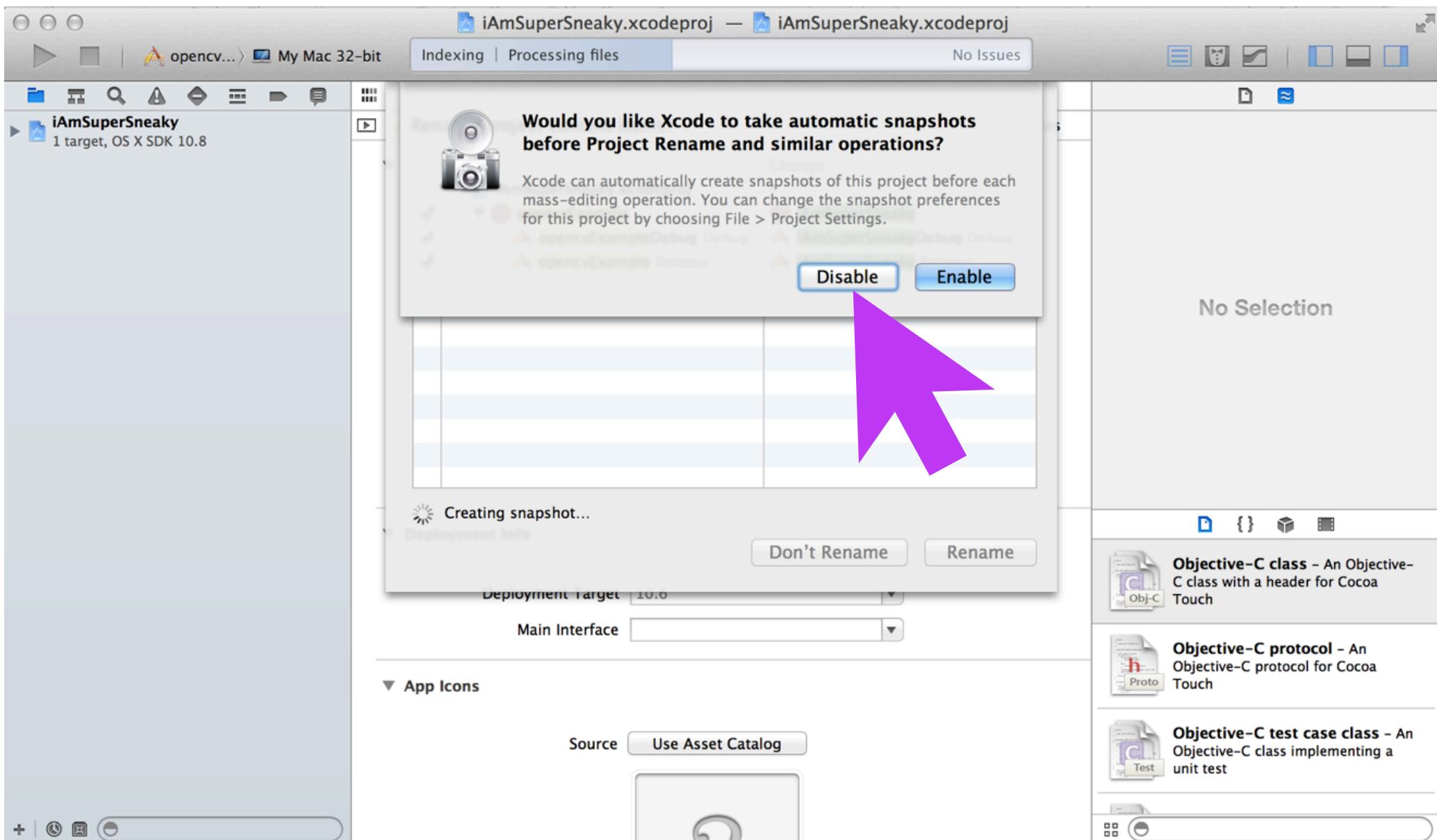
No Selection

Objective-C class – An Objective-C class with a header for Cocoa Touch

Objective-C protocol – An Objective-C protocol for Cocoa Touch

Objective-C test case class – An Objective-C class implementing a unit test

This screenshot shows the Xcode interface during a project rename operation. A modal dialog titled 'Rename project content items?' is open in the center. It contains two columns: 'Current' and 'Change'. Under 'Current', there are entries for the project itself ('iAmSuperSneaky.xcodeproj') and a target ('opencvExample'). Under 'Change', these are renamed to 'iAmSuperSneaky'. Below the table are buttons for 'Don't Rename' and 'Rename'. The 'Rename' button is highlighted. The Xcode interface around the dialog includes a sidebar with 'iAmSuperSneaky' selected, a toolbar at the top, and a library on the right side with categories like 'Objective-C class', 'Protocol', and 'Test'.



iAmSuperSneaky.xcodeproj — main.cpp

Running iAmSuperSneakyDebug.app : opencvExample Debug No Issues

Quick Help
No Quick Help

iAmSuperSneaky
1 target, OS X SDK 10.8
openFrameworks-Info.plist
Project.xcconfig
src
main.cpp
testApp.cpp
testApp.h
openFrameworks
addons
frameworks
iAmSuperSneakyDebug.app

```
#include "ofMain.h"
#include "testApp.h"

=====
int main( ){
    ofSetupOpenGL(1024,768, OF_WINDOW);           // <----- setup the GL
    // context

    // this kicks off the running of my app
    // can be OF_WINDOW or OF_FULLSCREEN
    // pass in width and height too:
    ofRunApp( new testApp());
}

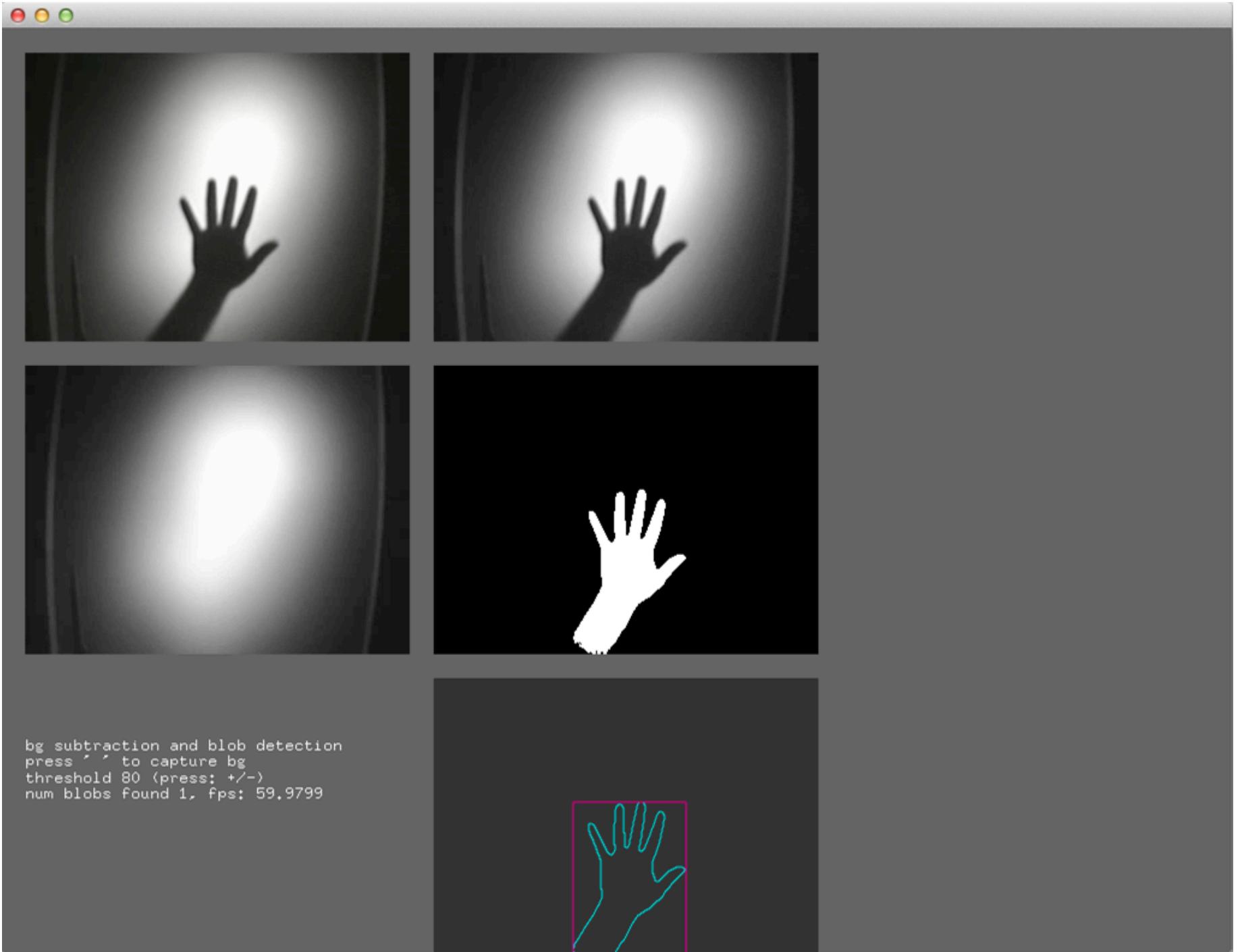
Build Succeeded
```

No Selection

Objective-C class – An Objective-C class with a header for Cocoa Touch

Objective-C protocol – An Objective-C protocol for Cocoa Touch

Objective-C test case class – An Objective-C class implementing a unit test



```
bg subtraction and blob detection
press ' ' to capture bg
threshold 80 (press: +/-)
num blobs found 1, fps: 59.9799
```

The Advanced Way

(also known as the “oh crap I forgot” way)

in codeblocks:

<http://bit.ly/1eHBNaJ>

emptyExample.xcodeproj — testApp.h

Finished running emptyExampleDebug : emptyExample Debug

#pragma once

#include "ofMain.h"

class testApp : public ofBaseApp{
public:
 void setup();
 void update();
 void draw();

 void keyPressed(int key);
 void KeyReleased(int key);
 void mouseMoved(int x, int y);
 void mouseDragged(int x, int y, int button);
 void mousePressed(int x, int y, int button);
 void mouseReleased(int x, int y, int button);
 void windowResized(int w, int h);
 void dragEvent(ofDragInfo dragInfo);
 void gotMessage(ofMessage msg);
};

No Selection

ofxXmlSettings

FAVORITES

- Dropbox
- Macintosh...
- AirDrop
- Applications
- Documents
- Desktop
- Downloads
- Movies
- Music
- Pictures

DEVICES

- Remote Disc
- OF_DT

addons

apps

CHANGELOG.md

CodeForArt

docs

examples

export

INSTALL.md

libs

LICENSE.md

other

projectGenerator_osx

README.md

scripts

ofx3DModelLoader

ofxAassimpModelLoader

ofxBlobTracker

ofxCv

ofxFaceTracker

ofxGui

ofxKinect

ofxLibwebsockets

ofxNetwork

ofxOpenCv

ofxOsc

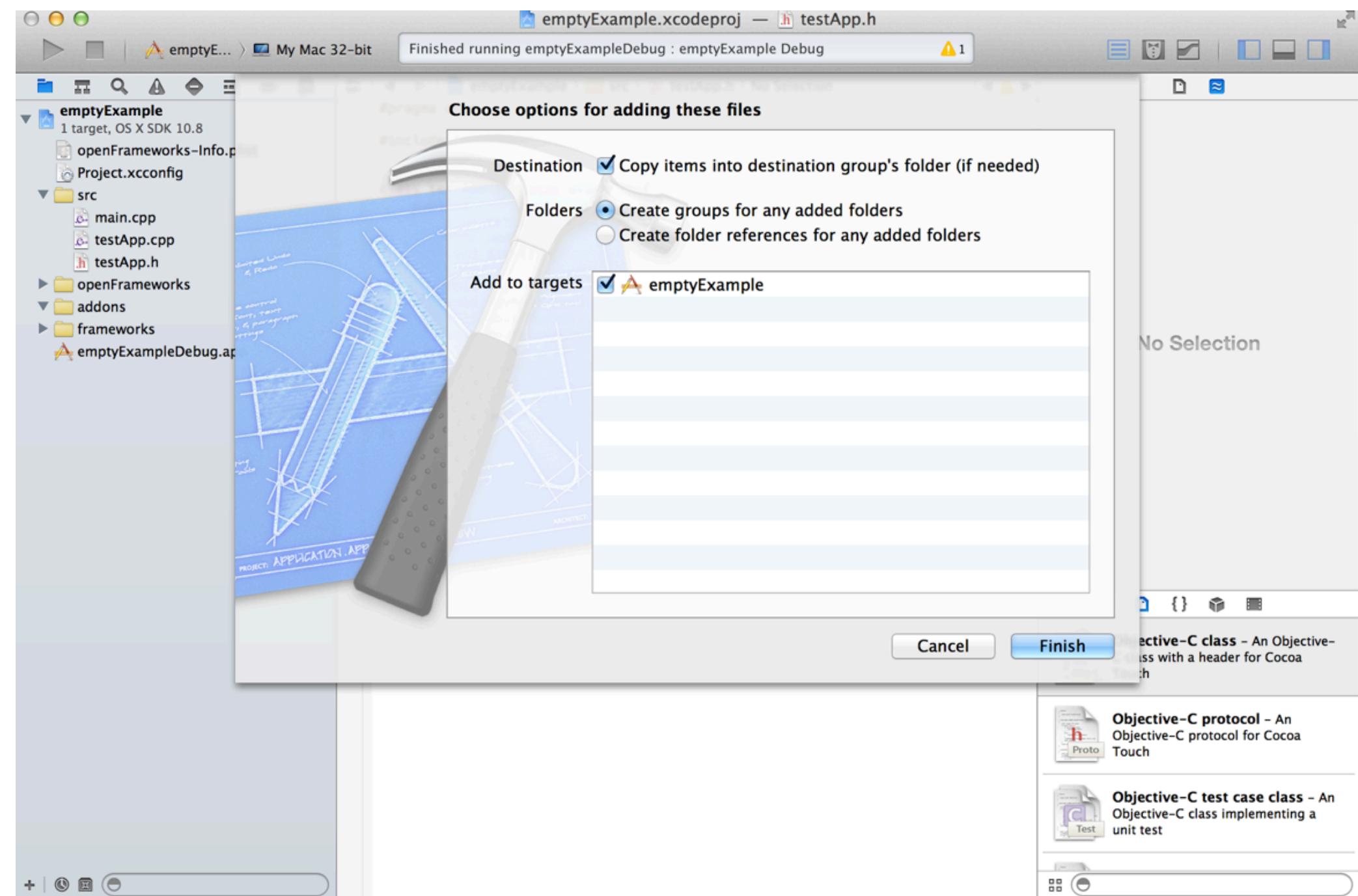
ofxSpacebrew

ofxSvg

ofxThreadedImageLoader

ofxVectorGraphics

ofxXmlSettings



emptyExample.xcodeproj — testApp.h

Finished running emptyExampleDebug : emptyExample Debug 1

#pragma once

#include "ofMain.h"

class testApp : public ofBaseApp{
public:
 void setup();
 void update();
 void draw();

 void keyPressed(int key);
 void keyReleased(int key);
 void mouseMoved(int x, int y);
 void mouseDragged(int x, int y, int button);
 void mousePressed(int x, int y, int button);
 void mouseReleased(int x, int y, int button);
 void windowResized(int w, int h);
 void dragEvent(ofDragInfo dragInfo);
 void gotMessage(ofMessage msg);
};

No Selection

Objective-C class – An Objective-C class with a header for Cocoa Touch

Objective-C protocol – An Objective-C protocol for Cocoa Touch

Objective-C test case class – An Objective-C class implementing a unit test



emptyExample.xcodeproj — testApp.h

Running emptyExampleDebug : emptyExample Debug

emptyExample 1 target, OS X SDK 10.8
openFrameworks-Info.plist
Project.xcconfig
src
main.cpp
testApp.cpp
testApp.h
openFrameworks
addons
ofxXmlSettings
frameworks
emptyExampleDebug.app

```
#pragma once

#include "ofMain.h"

class testApp : public ofBaseApp{
public:
    void setup();
    void update();
    void draw();

    void keyPressed(int key);
    void keyReleased(int key);
    void mouseMoved(int x, int y);
    void mouseDragged(int x, int y, int button);
    void mousePressed(int x, int y, int button);
    void mouseReleased(int x, int y, int button);
    void windowResized(int w, int h);
    void dragEvent(ofDragInfo dragInfo);
    void gotMessage(ofMessage msg);
};
```

No Selection

Build Succeeded

Objective-C class – An Objective-C class with a header for Cocoa Touch

Objective-C protocol – An Objective-C protocol for Cocoa Touch

Objective-C test case class – An Objective-C class implementing a unit test

emptyExample.xcodeproj — testApp.h

Finished running emptyExampleDebug : emptyExample Debug 1

emptyExample 1 target, OS X SDK 10.8
openFrameworks-Info.plist
Project.xcconfig
src
main.cpp
testApp.cpp
testApp.h
openFrameworks
addons
ofxXmlSettings
frameworks
emptyExampleDebug.app

```
#pragma once

#include "ofMain.h"
#include "ofxXmlSettings.h"
#include "ofxXmlSettings.h"

class testApp : public ofBaseApp{
public:
    void setup();
    void update();
    void draw();

    void keyPressed(int key);
    void KeyReleased(int key);
    void mouseMoved(int x, int y);
    void mouseDragged(int x, int y, int button);
    void mousePressed(int x, int y, int button);
    void mouseReleased(int x, int y, int button);
    void windowResized(int w, int h);
    void dragEvent(ofDragInfo dragInfo);
    void gotMessage(ofMessage msg);
};
```

Quick Help
No Quick Help
Search Documentation

Objective-C class – An Objective-C class with a header for Cocoa Touch

Objective-C protocol – An Objective-C protocol for Cocoa Touch

Objective-C test case class – An Objective-C class implementing a unit test

emptyExample.xcodeproj — testApp.h

Running emptyExampleDebug : emptyExample Debug 1

emptyExample 1 target, OS X SDK 10.8
openFrameworks-Info.plist
Project.xcconfig
src
main.cpp
testApp.cpp
testApp.h
openFrameworks
addons
ofxXmlSettings
frameworks
emptyExampleDebug.app

```
#pragma once

#include "ofMain.h"
#include "ofxXmlSettings.h"

class testApp : public ofBaseApp{
public:
    void setup();
    void update();
    void draw();

    void keyPressed(int key);
    void keyReleased(int key);
    void mouseMoved(int x, int y);
    void mouseDragged(int x, int y, int button);
    void mousePressed(int x, int y, int button);
    void mouseReleased(int x, int y, int button);
    void windowResized(int w, int h);
    void dragEvent(ofDragInfo dragInfo);
    void gotMessage(ofMessage msg);
};
```

Quick Help
No Quick Help
Search Documentation

Build Succeeded

Objective-C class – An Objective-C class with a header for Cocoa Touch

Objective-C protocol – An Objective-C protocol for Cocoa Touch

Objective-C test case class – An Objective-C class implementing a unit test

Now, try this with OpenCV.



feel like this?

Don't worry, it's not just you.

OpenCV is set up differently than other add-ons, so unless you are a C++ savant with crazy file structure skillz*, this won't work.

*if you are, please teach a dorkShop.

My advice?

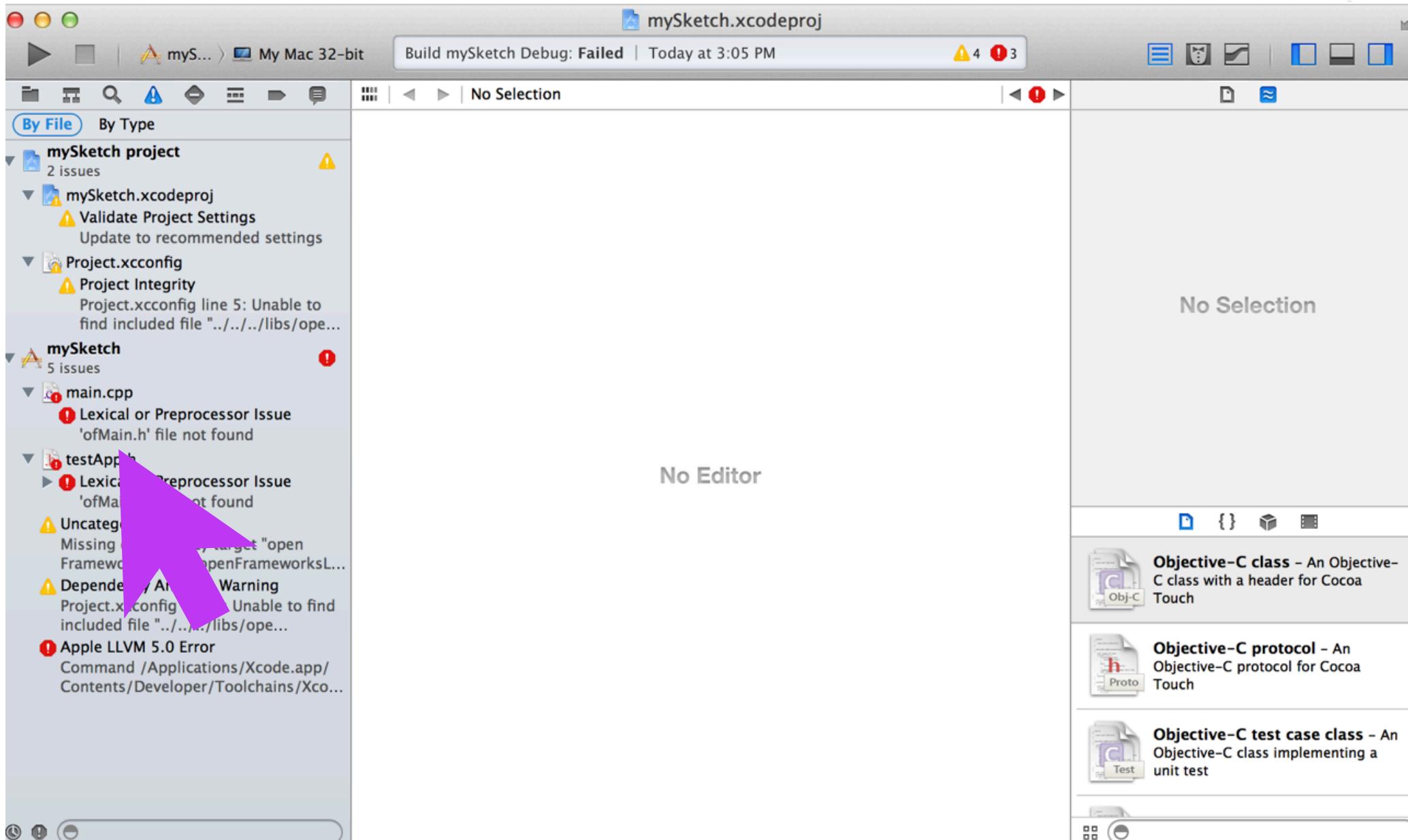
Always add OpenCV when you make a new application. You may not always need it, but when you do, you'll be happy you have it.

Things To Remember

Some add-ons need friends.



Usually, the developer will give you a heads up in the readme file, but not always. If you're getting "ofxSomething.h file not found", that may be why. The add on name will be whatever *Something* is.



(If you're getting "ofMain.h file not found", though, your app is in the wrong folder.)

Sometimes Add-Ons Are Just Rotten.



If you just can't get your add-on to work, it may not be you. Sometimes, an add-on is made for an old version of oF. Sometimes it just wasn't set-up well and needs to be restructured. Google is your friend.

There are more!



Head to ofxaddons.com. Then...



ofxAddons is a directory of extensions and libraries for the **OpenFrameworks** creative coding toolkit. Compiled fresh from **Github** daily.

addons // freshest // unsorted // contributors // make your own!

category	animation bridges computer vision graphics gui
clear	hardware interface ios machine learning physics sound
all	typography utilities video/camera web/networking

etc stars updated since
config file example

found 718 addons



[video/camera] legacy openFrameworks wrapper for the xbox kinect (OF pre-0.8.0+ only) - ofxKinect is now included and is being maintained in OF releases

[config file](#) [1 example](#)

created by [ofTheo](#)

updated about a month ago (~0.7.4) ★ 471



[computer vision] ASM face tracking addon based on Jason Saragih's FaceTracker.

[8 examples](#)

created by [kylemcdonald](#)

updated about a month ago (~0.7.4) ★ 375

fork by [PatHightree](#)

updated 3 days ago (~0.8.0)



[gui] A User Interface Library/Addon for openFrameworks

[19 examples](#)

created by [rezaali](#)

updated 13 days ago (~0.8.0) ★ 278

fork by [Noura](#)

updated about 10 hours ago (~0.8.0)

fork by [morethanlogic](#)

updated a day ago (~0.8.0)

fork by [outsidecontext](#)

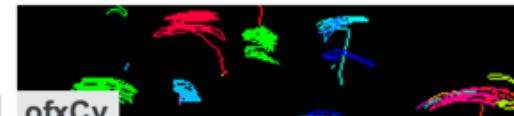
updated 2 days ago (~0.8.0)

fork by [jvelazqueztraut](#)

updated 9 days ago (~0.8.0)



[computer vision] Wrapper for OpenNI_NITE and github.com/ofTheo/ofxKinect



GitHub, Inc. [US] <https://github.com/ofTheo/ofxKinect>

This repository Search or type a command Explore Gist Blog Help

samua407 Watch 37 Star 471 Fork 91

ofTheo / ofxKinect

legacy openFrameworks wrapper for the xbox kinect (OF pre-0.8.0+ only) - ofxKinect is now included and is being maintained in OF releases

332 commits

1 branch

5 releases

14 contributors



branch: master

ofxKinect / [+](#)

Update README.md

danomatika authored a month ago

latest commit [ebb9075bcb](#)

kinectExample	added Windows driver info to example header	a month ago
libs	updated to 32/64 bit libusb fat lib for OSX	2 months ago
scripts	woops again, forgot loader.h is required by libusb10_emu on windows	2 months ago
src	final sync with OF core ofxKinect: triple buffered video grabbing	a month ago
.gitignore	reorganized libs folder, updated addons_config; fleshed out device ca...	2 months ago
LICENSE.txt	now licensed under the MIT License (matches OF licensing)	2 years ago
README.md	Update README.md	a month ago
addon_config.mk	reorganized libs folder, updated addons_config; fleshed out device ca...	2 months ago
ofxaddons_thumbnail.png	added (temporary) ofxaddons.com thumbnail for upcoming v2	a month ago

[README.md](#)

[Code](#)

[Issues](#) 0

[Pull Requests](#) 0

[Wiki](#)

[Pulse](#)

[Graphs](#)

[Network](#)

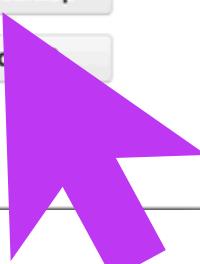
[HTTPS clone URL](#)

<https://github.com>

You can clone with [HTTPS](#), [SSH](#), or [Subversion](#)

[Clone in Desktop](#)

[Download](#)



GitHub, Inc. [US] <https://github.com/ofTheo/ofxKinect>

This repository Search or type a command Explore Gist Blog Help

samua407 Watch 37 Star 471 Fork 91

ofTheo / ofxKinect

legacy openFrameworks wrapper for the xbox kinect (OF pre-0.8.0+ only) - ofxKinect is now included and is being maintained in OF releases

332 commits

1 branch

5 releases

14 contributors



branch: master

ofxKinect / +

Update README.md

danomatika authored a month ago

latest commit [ebb9075bcb](#)

[kinectExample](#)

added Windows driver info to example header

a month ago

[libs](#)

updated to 32/64 bit libusb fat lib for OSX

2 months ago

[scripts](#)

woops again, forgot loader.h is required by libusb10_emu on windows

2 months ago

[src](#)

final sync with OF core ofxKinect: triple buffered video grabbing

a month ago

[.gitignore](#)

reorganized libs folder, updated addons_config; fleshed out device ca...

2 months ago

[LICENSE.txt](#)

now licensed under the MIT License (matches OF licensing)

2 years ago

[README.md](#)

Update README.md

a month ago

[addon_config.mk](#)

reorganized libs folder, updated addons_config; fleshed out device ca...

2 months ago

[ofxaddons_thumbnail.png](#)

added (temporary) ofxaddons.com thumbnail for upcoming v2

a month ago

Code

Issues

0

Pull Requests

0

Wiki

Pulse

Graphs

Network

HTTPS clone URL

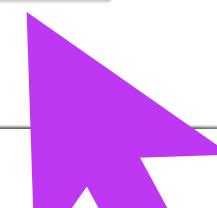
<https://github.com>

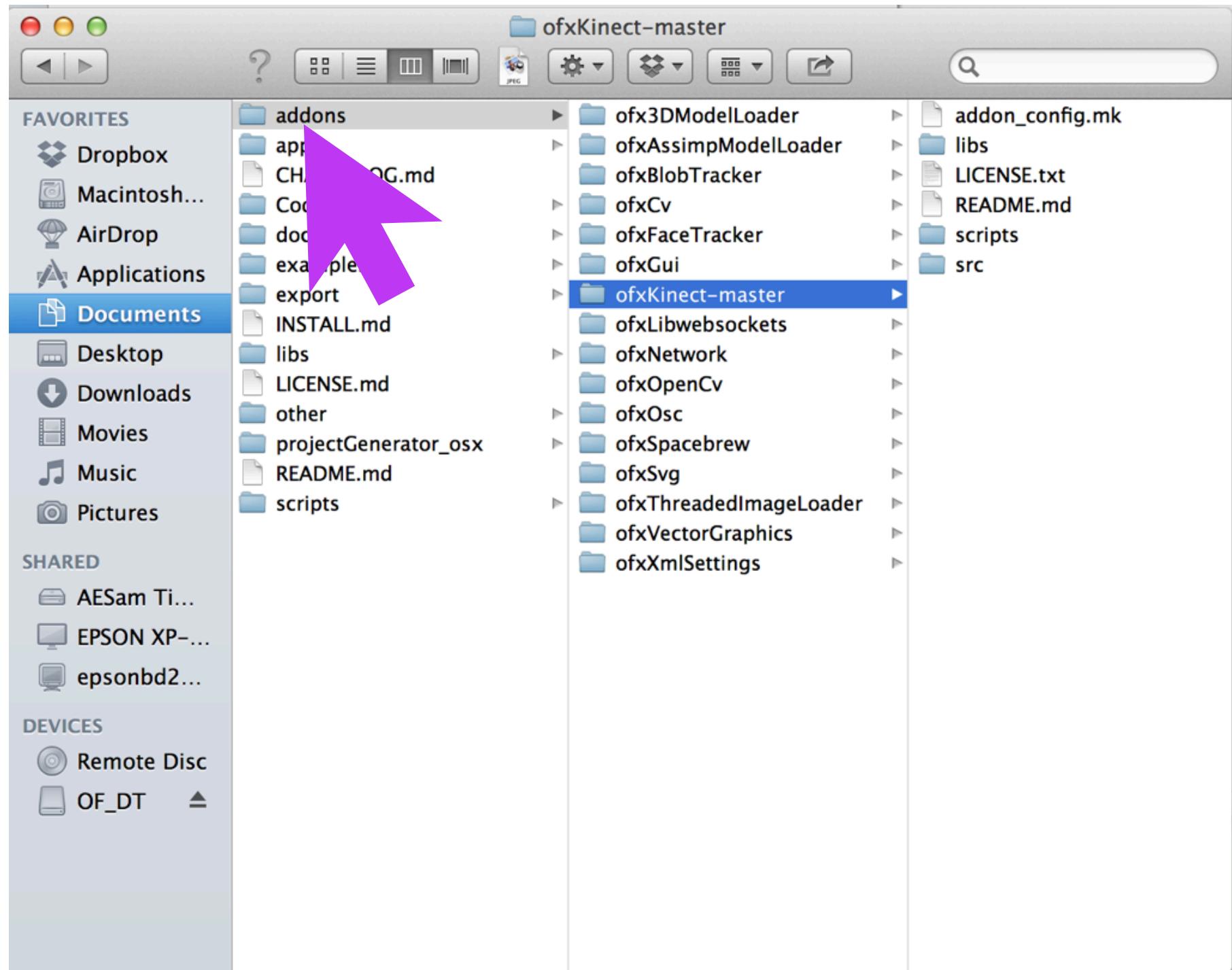


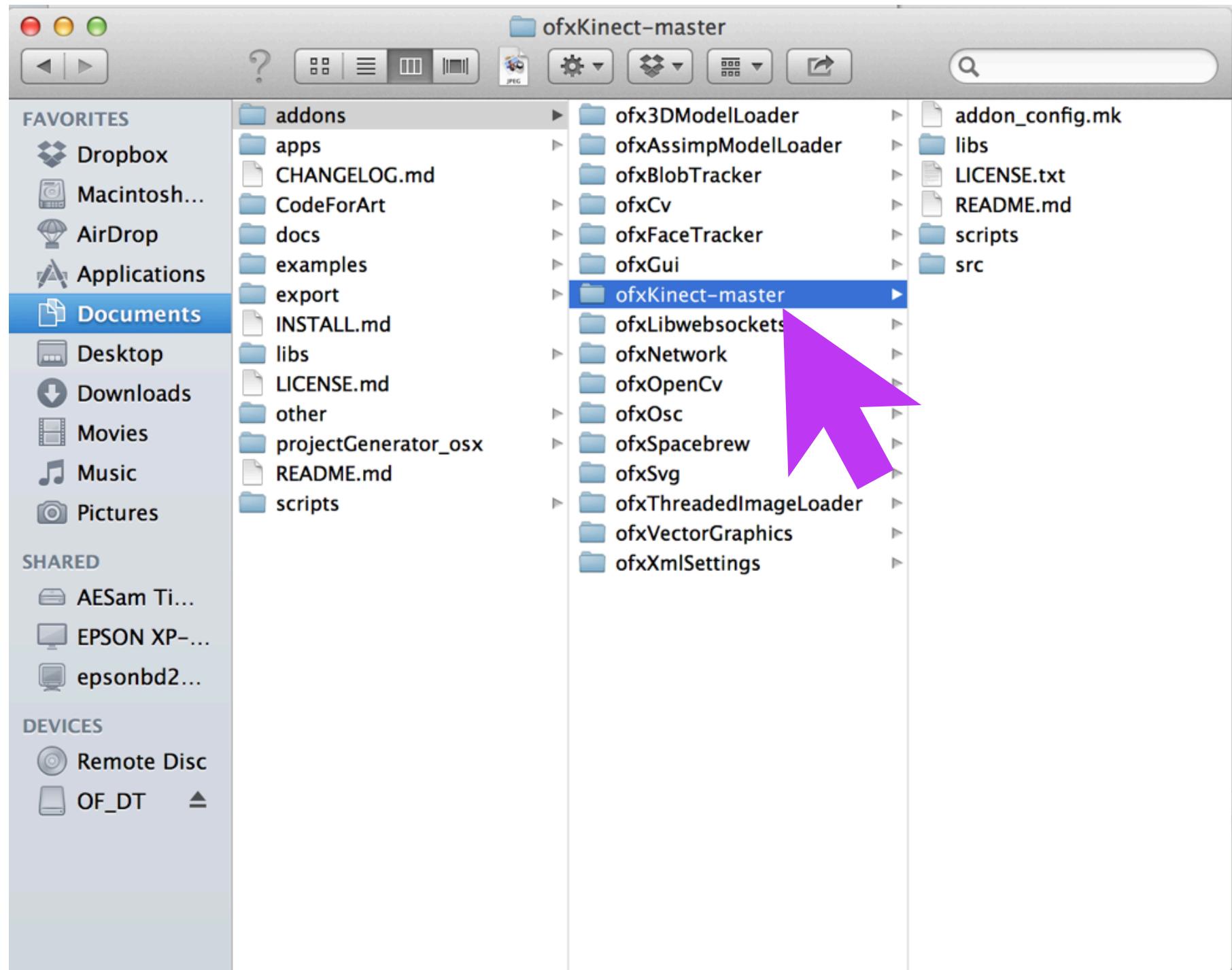
You can clone with [HTTPS](#), [SSH](#), or [Subversion](#).

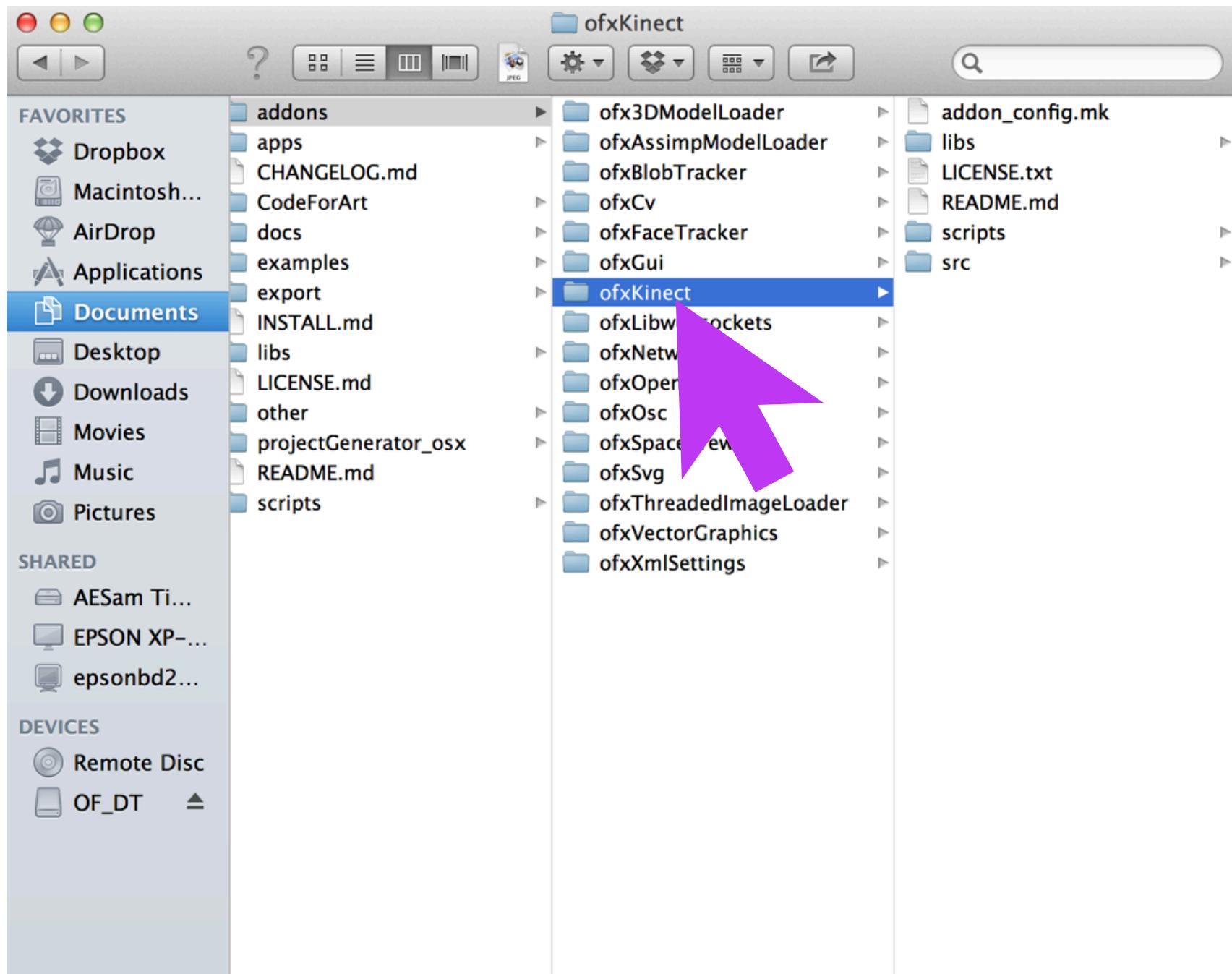
Clone in Desktop

Download ZIP









You're Officially Addon Pros!



Any Questions?