

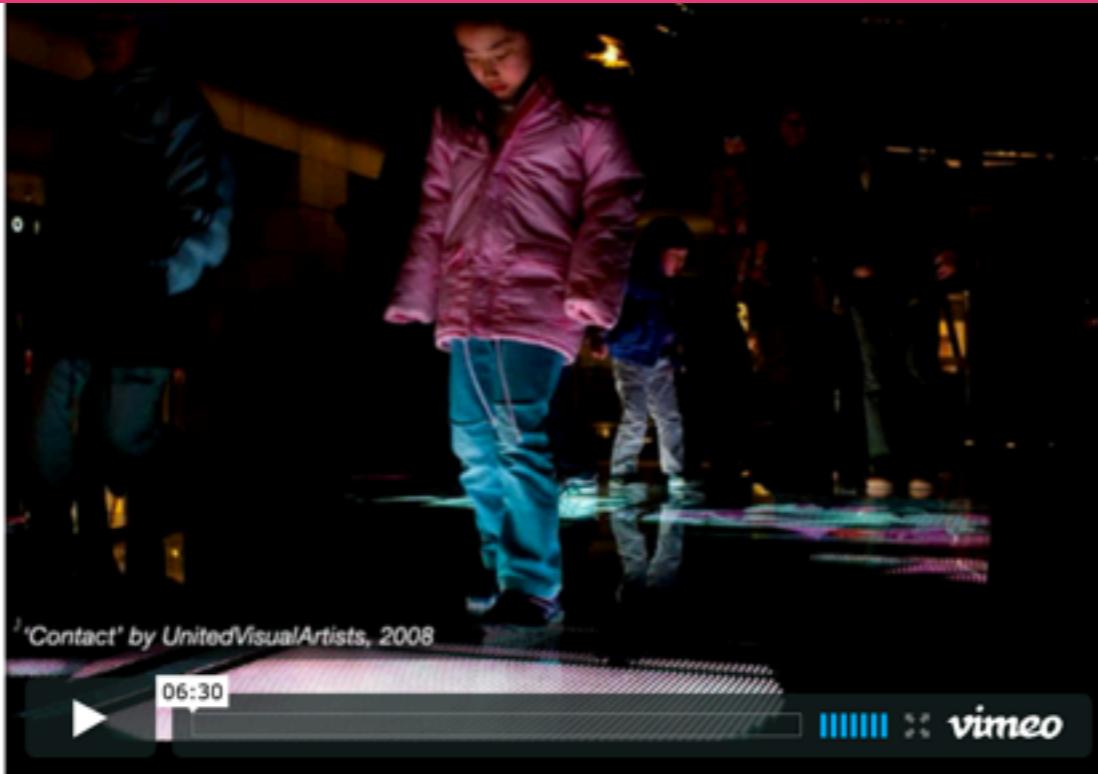


about download documentation tutorials gallery community development

> forum > addons > wiki > github > mailing list > IRC

english / [japanese](#)

# openFrameworks



openFrameworks is an open source C++ toolkit for creative coding.

## download

Grab the most recent release (0.7.4) and follow the setup guide to get openFrameworks running.

## documentation

Reference for openFrameworks classes, functions and addons. For guides and tutorials, see the [wiki](#).

## forum

The forum is a place to meet other people working with openFrameworks. It's a place to share your work, or find help solving problems.

### twitter



@elliotwoods @danhatt  
@omniversity @openframeworks  
Agreed. Let's do eet!



@Sensebellum Max MSP, Quartz Composer, Isadora, OpenFrameworks, Pure Data, Processing. I'm sure there are others.



From Light, Lasers, and Smoke, Solid-Looking Sculptures in the Air [OpenFrameworks]:

### forum

: Re: videomapping - ofxMapaMok  
HiWell im not an expert in nothing but i will try to answer:- for github, you have to ways, the easy...

: Re: simple question : how to make a pause ?

I'm not sure I fully understand the scenario, but you might try using the ofxJSON or similar add...

: Re: OF-compatible wireless cameras

### github



Fix broken link to Codeblocks setup guide. Closes #2051 5 days ago



create\_package: quick fix for projectGenerator vs 22 days ago



linux codeblocks: fix wrong absolute path 24 days ago

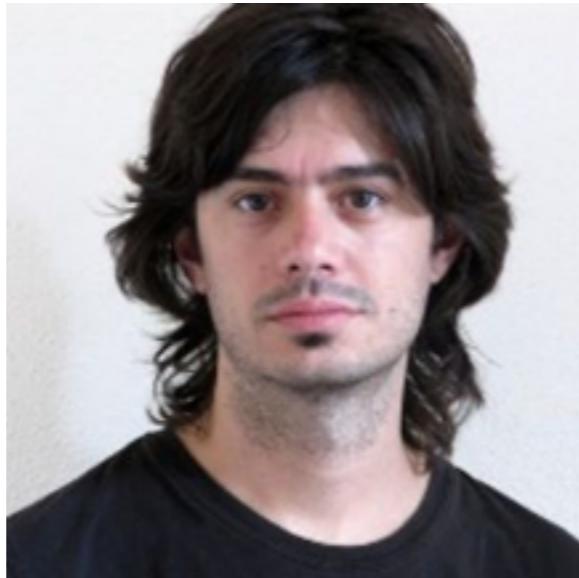


nightly weeks: remove 1 week old versions 24 days ago

# openFrameworks team



Zach Lieberman



Arturo Castro



Theo Watson

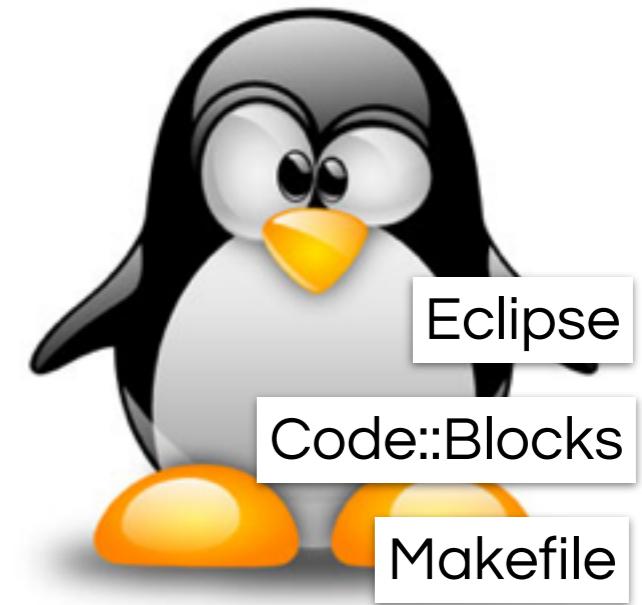
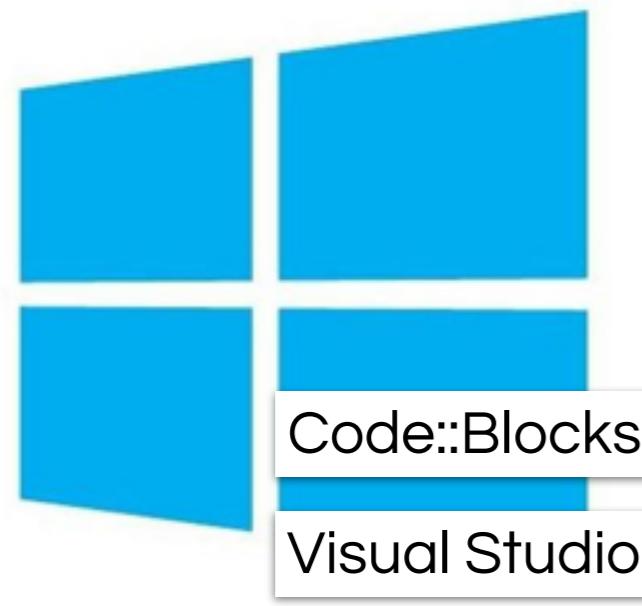


(Kyle McDonald)

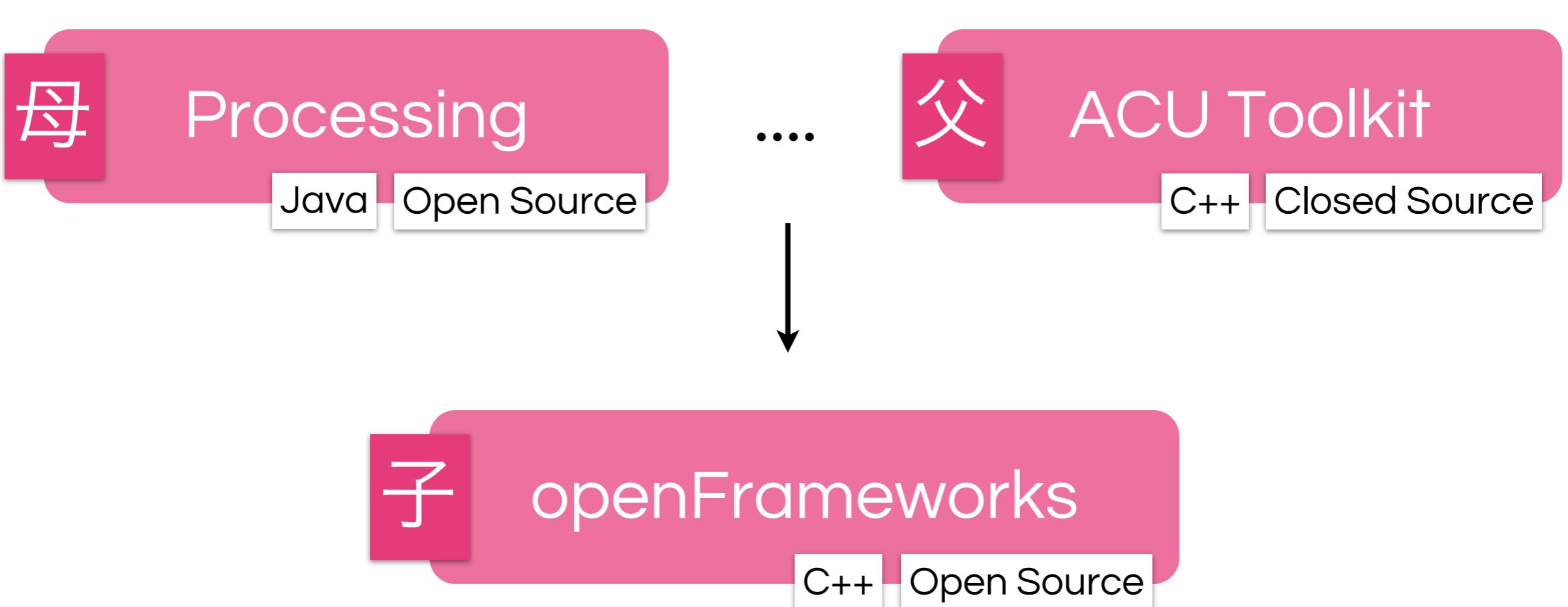
# openFrameworks team

- 3D leader: [Elliot Woods](#) (elliotwoods)
- Addons leader(s): [James George](#) (obviousjim) and [Greg Borenstein](#) (atduskgreg)
- Community manager: [Kyle McDonald](#) (kylemcdonald)
- Documentation leader: [Dayan Moisa](#) (justdayan)
- Forum leader: [Jason Van Cleave](#) (jvcleave)
- GitHub leader: [Christoph Buchner](#) (bilderbuchi)
- Hardware leader: [Josh Noble](#) (joshua noble)
- Internals/app leader: [Philip Whitfield](#) (underdoeg)
- iOS leader: [Lukasz Karluk](#) (julapy)
- Outreach leader: [Caitlin Morris](#) (c\_tl\_n)
- Sound leader: [Damian Stewart](#) (damian)
- Tutorial leader(s): [Diederick Huijbers](#) (roxlu) and [Jeff Crouse](#) (jefftimesten)
- Typography leader: [Christopher Baker](#) (bakercp)
- Video leader: [James George](#) (obviousjim)
- Windows leader: [Matthew Gingold](#) (gameoverhack)

# platforms

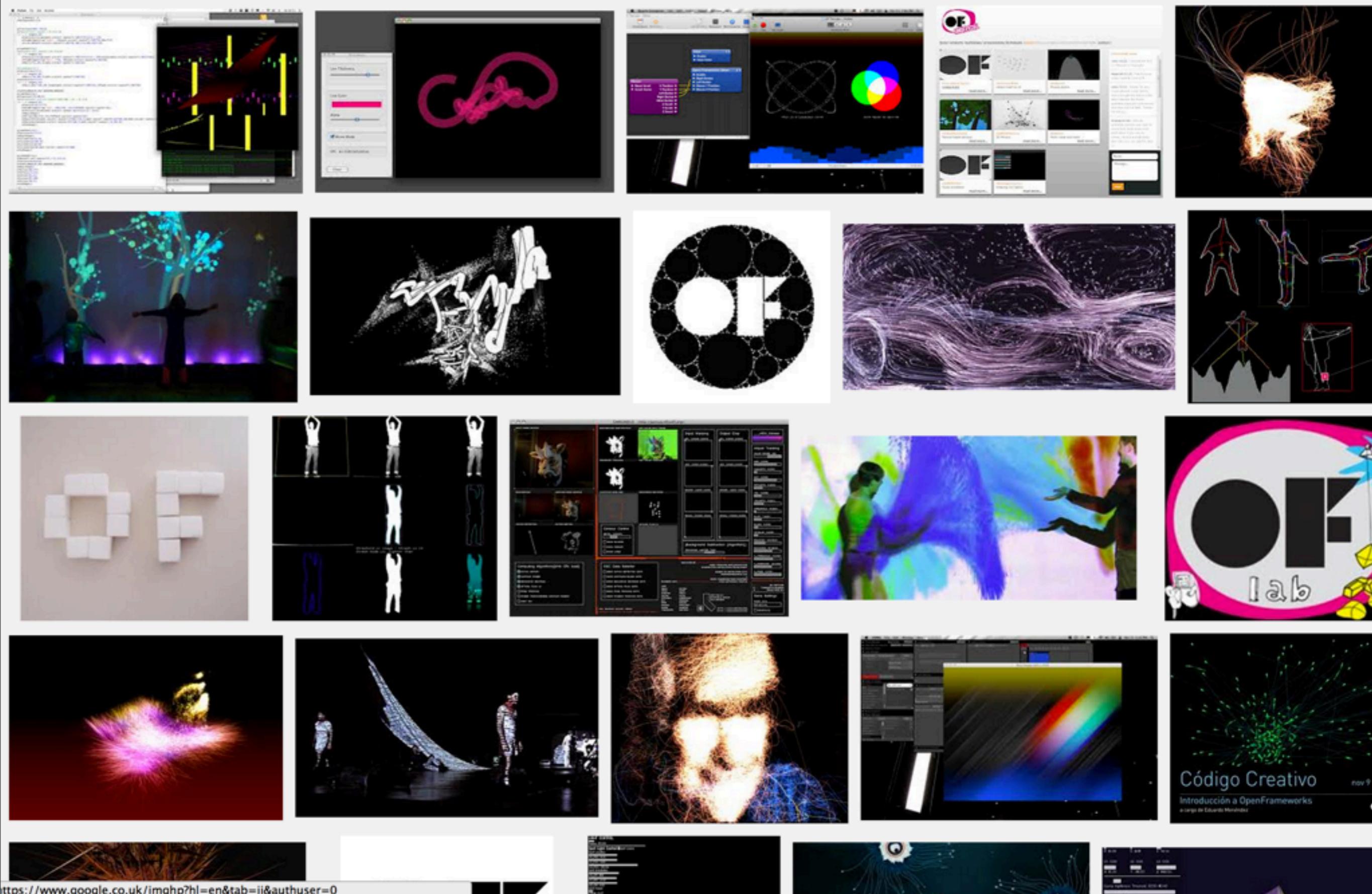


# openFrameworks origins



# oF community







# openFrameworks work examples



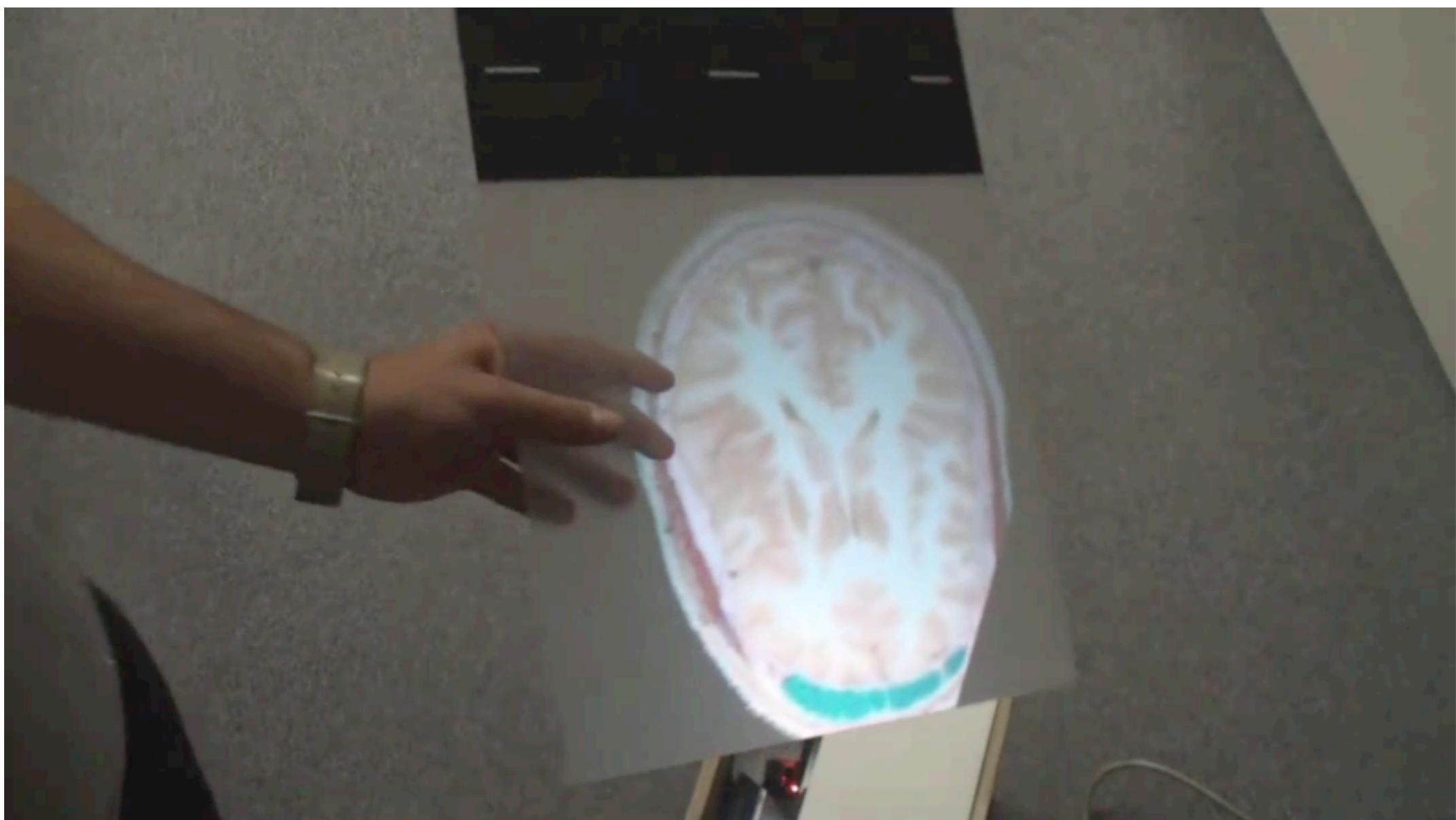
EyeWriter // FAT Lab + openFrameworks team // 2009

# openFrameworks project examples



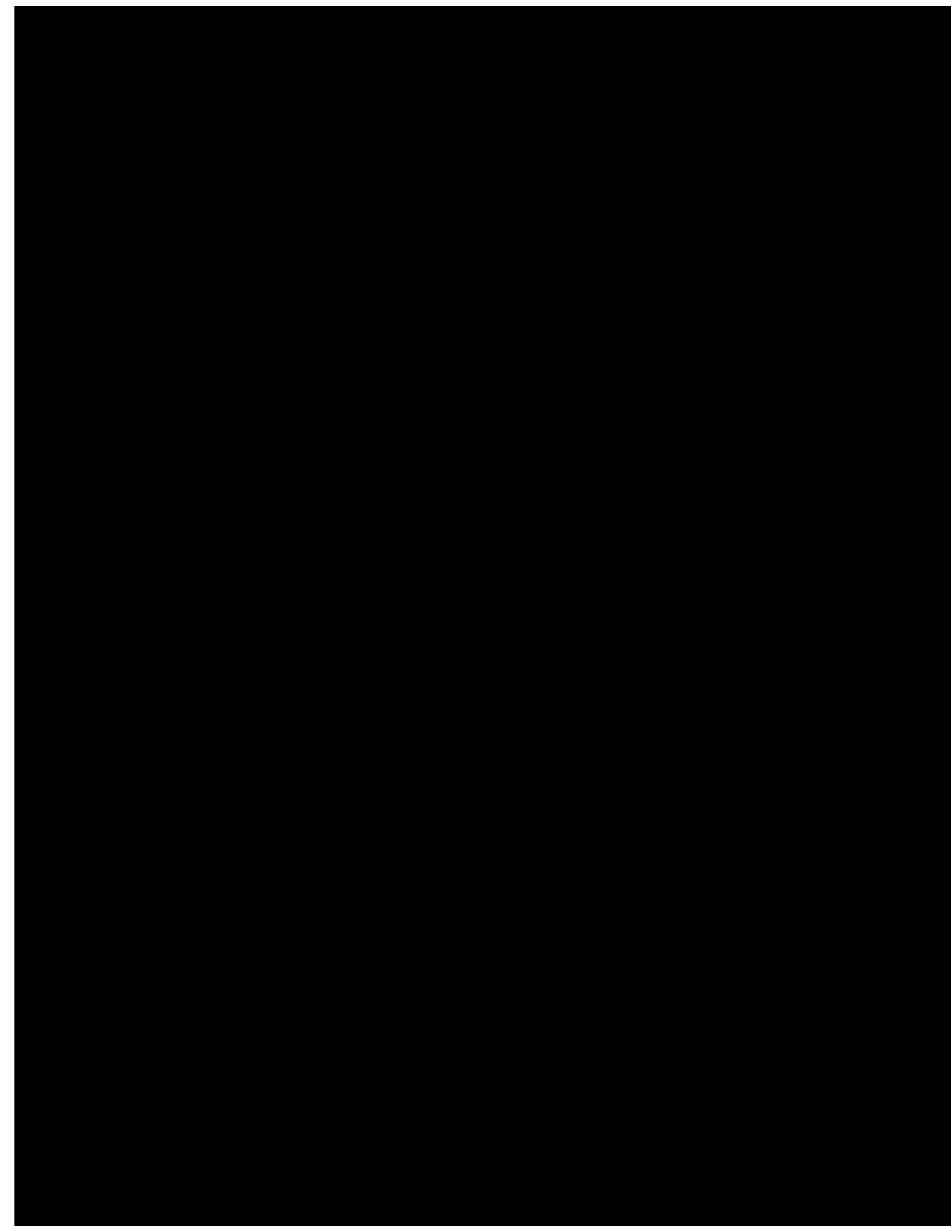
Lit Tree // Kimchi and Chips // 2011

# openFrameworks project examples



Volume Slicing Display // Alvaro Cassinelli // 2006

# openFrameworks project examples



SpellTower // Zach Gage // 2011

# simple oF project

testApp.h

testApp.cpp

main.cpp

# simple oF project

testApp.h

Declares testApp class

testApp.cpp

Defines testApp class

edit these files to define your program

main.cpp

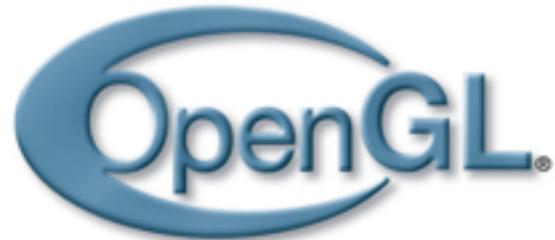
Hosts testApp

# simple oF project

The screenshot shows the Xcode IDE interface with a project titled "lenticularMeasure.xcodeproj". The "testApp.cpp" file is open in the editor. The code implements a basic OpenFrameworks application that draws a string with varying colors based on its position and prints the current pitch value to the console.

```
//  
//  
void testApp::update(){  
}  
  
float pitch = 1.0f;  
//  
//  
void testApp::draw(){  
    for(float i=0; i<ofGetWidth(); i++)  
    {  
        if (int(i) % int(pitch * 2)) {  
            ofSetColor(0);  
        } else {  
            ofSetColor(255);  
        }  
        ofLine(i, 0, i, ofGetHeight());  
    }  
    string s = "test\tdrawStringBitmap()\twith\ttabs\nnone  
\ttwo\ttwo\tthree\tthree\tfour\nmore\tthan  
\tmeets\tthe\tI/O";  
    ofDrawBitmapStringHighlight(s, 30, 300);  
}  
  
//  
//  
void testApp::keyPressed(int key){  
    if (key==OF_KEY_UP)  
        pitch+= 0.5;  
    if (key==OF_KEY_DOWN)  
        pitch-= 0.5;  
  
    cout << pitch;  
}  
  
//  
//  
void testApp::keyReleased(int key){  
}  
  
//  
//  
void testApp::mouseMoved(int x, int y ){  
}  
  
#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);  
};
```

# inbuilt libraries



OpenGL, GLEW, GLUT, libtess2 and cairo  
(graphics)



OpenCV (computer vision)

rtAudio, PortAudio, OpenAL, Kiss FFT,  
FMOD (audio)

FreeType (fonts)



Freelimage (image files)

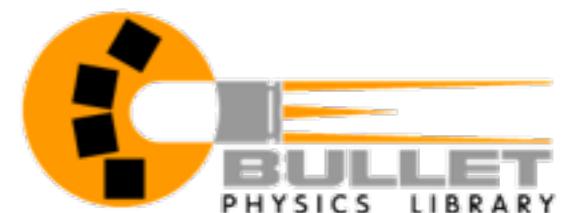
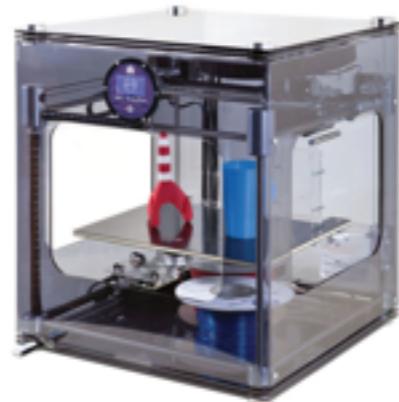
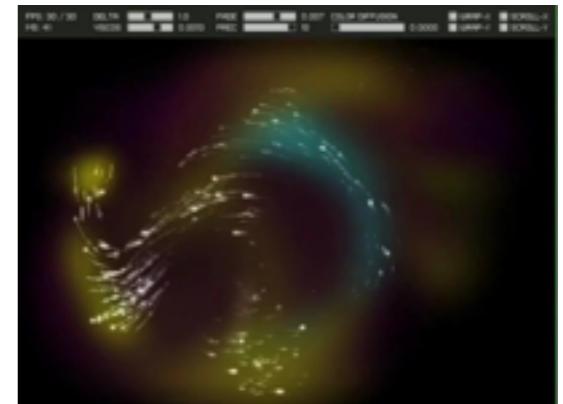
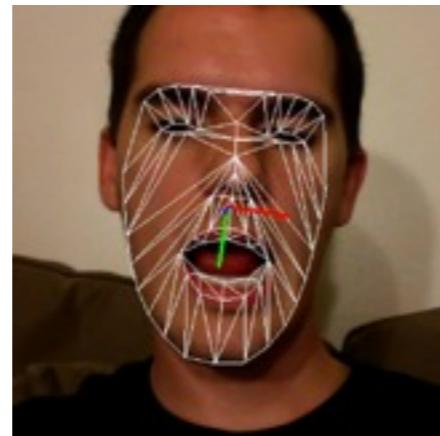
Quicktime, GStreamer, videoInput (video)

Poco (system utils)

Assimp (3d models)



# addons



# addons

## [ofxExplodingString](#)

by armadillu

Simple OF addon to quickly make  
ofTrueType based strings explode in  
pieces. [\[view on Github\]](#)

## [ofxFlash](#)

by julapy

ofxFlash is a addon for openFrameworks  
which enables the loading of Flash XFL  
files into openFrameworks [\[view on  
Github\]](#)

## [ofxExplosion](#)

by armadillu

Explosion animation [\[view on Github\]](#)

## [ofxFakeMotionBlur](#)

by toruurakawa

Simple motion blur addon for  
openframeworks [\[view on Github\]](#)

## [ofxMapRouting](#)

by armadillu

A\* path finding for OF, tweaked for  
performance and small memory footprint -  
tweaks allowing to go for faster to process  
(but sub-optimal) paths [\[view on Github\]](#)

## [ofxParticleEmitter](#)

by sroske

A port of a particle renderer for  
openframeworks and Particle Designer  
[\[view on Github\]](#)

## [ofxPlaylist](#)

by tgfrerer

(maintained) Keyframe animation library  
for openFrameworks [\[view on Github\]](#)

## [ofxMotionTemplates](#)

by naus3a

a motion templates addon for  
OpenFrameworks [\[view on Github\]](#)

## [ofxParticleSystem](#)

by nathankoch

Simple Particle system built in  
openFrameworks [\[view on Github\]](#)

## [ofxProjector](#)

by nikolasp

OF implementation of Stewart Smith's  
(www.stewdio.org) processing Scene /

## [ofxOpenSteer](#)

by underdoeg

Openframeworks lightweight wrapper for  
the steering behaviors library OpenSteer.  
[\[view on Github\]](#)

## [ofxPathfinding](#)

by benMcChesney

library to use a\* sorting in open  
frameworks. \*\*\*\*Still in Progress [\[view on  
Github\]](#)

## [ofxSPK](#)

by satoruhiga

[\[view on Github\]](#)

<http://ofxAddons.com>

# project generator

<input type="checkbox"/>	ofx3DModelLoader
<input type="checkbox"/>	ofxAassimpModelLoader
<input type="checkbox"/>	ofxNetwork
<input type="checkbox"/>	ofxOpenCv
<input type="checkbox"/>	ofxOsc
<input type="checkbox"/>	ofxThreadedImageLoader
<input type="checkbox"/>	ofxVectorGraphics
<input type="checkbox"/>	ofxXmlSettings
<input type="checkbox"/>	ofxSvg

<input checked="" type="checkbox"/>	ofxGraycode
<input checked="" type="checkbox"/>	ofxGrabCam
<input checked="" type="checkbox"/>	ofxKinect
<input type="checkbox"/>	ofxAccelerometer
<input type="checkbox"/>	ofxAndroid
<input type="checkbox"/>	ofxXimea
<input type="checkbox"/>	ofxMultiTouch
<input type="checkbox"/>	ofxGynth
<input type="checkbox"/>	ofxOpenNI
<input type="checkbox"/>	ofxSane
<input type="checkbox"/>	ofxGui
<input type="checkbox"/>	ofxiPhone
<input type="checkbox"/>	ofxMachineVision
<input type="checkbox"/>	ofxTriangulate
<input checked="" type="checkbox"/>	ofxRay
<input type="checkbox"/>	ofxTimeline
<input type="checkbox"/>	ofxTimecode
<input type="checkbox"/>	ofxTween
<input type="checkbox"/>	ofxMGATimer
<input type="checkbox"/>	ofxTextInputField
<input type="checkbox"/>	ofxRange
<input type="checkbox"/>	ofxUI

select core and non-core addons to add

<< BACK

# project generator



PROJECT  
GENERATOR

Name: mySketch

<< CLICK TO CHANGE THE NAME

Path: /Volumes/SHARED/openFrameworks/apps/myApps

<< CLICK TO CHANGE THE DIRECTORY

Platforms: osx (xcode)

Addons: ofxGraycode, ofxGrabCam, ofxKinect, ofxRay

<< CLICK TO SELECT ADDONS

GENERATE PROJECT

addons set to: ofxGraycode, ofxGrabCam, ofxKinect, ofxRay

# share your projects

grasp. There are very few classes, and inside of those classes, there are very few functions. The code has been implemented so that within the classes there are minimal cross-referencing, making it quite easy to rip out and reuse, if you need, or to extend. [More Info](#)



## Laser Projection Mapping on Soap Bubbles by Memo Akten

17/05/2013 / openFrameworks

What happens when you mix soap bubbles and lasers? Memo Akten, 1/3 of Marshmallow Laser Feast, just got hold of Etherdream DAC laser and has been "messing" with it using openFrameworks. Memo developed software to control this ILDA controllable laser projector ...

<http://CreativeApplications.Net>