

CODE LIBERATION

INTRODUCTION TO CREATIVE CODING
AND GAMES

Introduction to Programming

- Versatile programming languages
- Applications and Software Creation
- Game Programming
- Assists in art and music development
- Aids in progression of scientific achievements
- And many more possibilities...

OpenFrameworks
Specific Games

DropBlocs

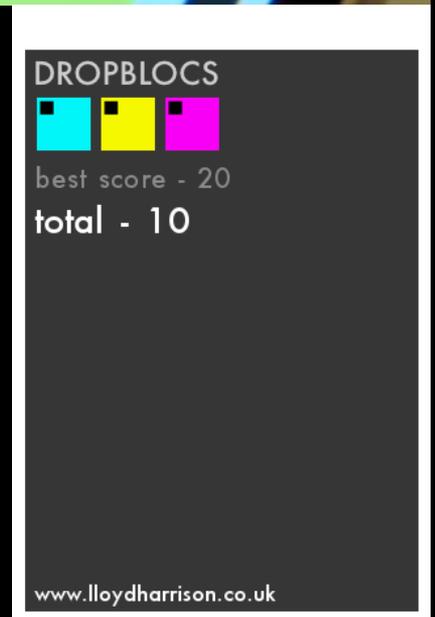
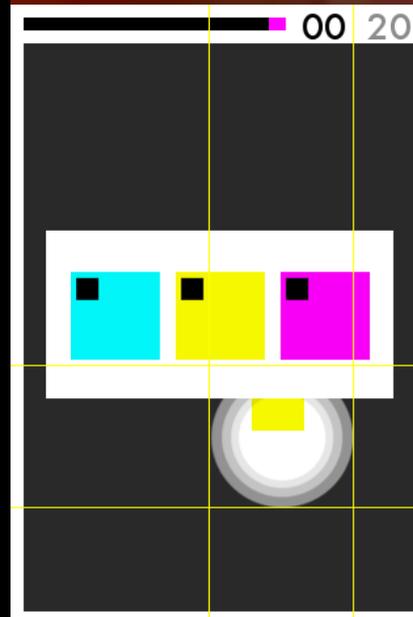
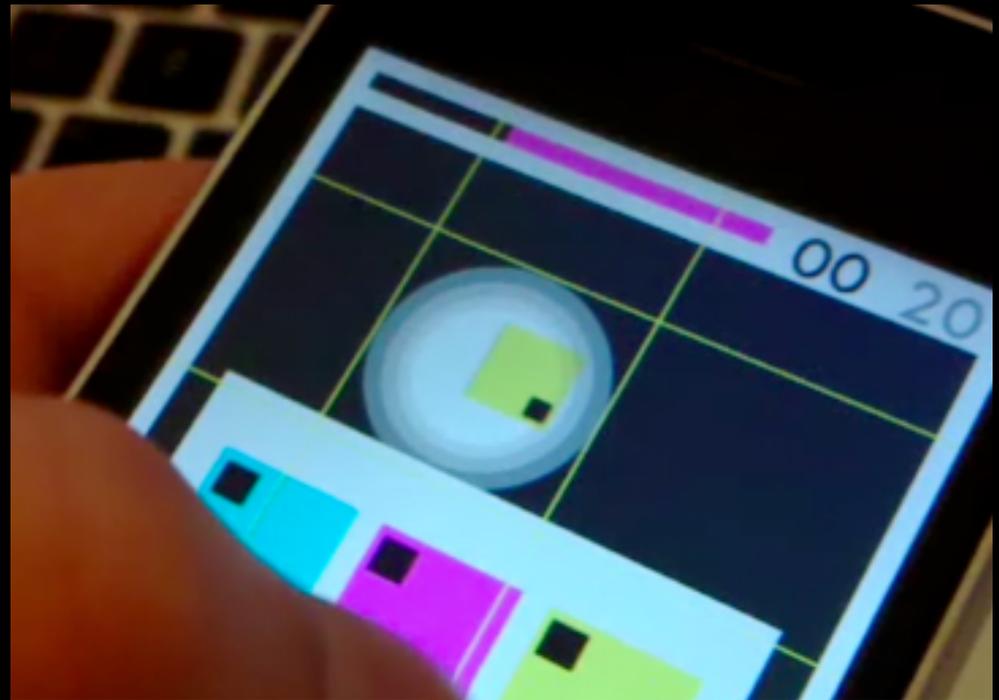
Created By: Lloyd Harrison

Using: openFrameworks

General Idea:

A block dropping game by dropping blocks onto matching counterparts via rotating and maintaining the spotlight. Features movement by tilting the phone.

Source: <http://www.creativeapplications.net/games/dropblocs-iphone-openframeworks-games/>



Shot Shot Shoot

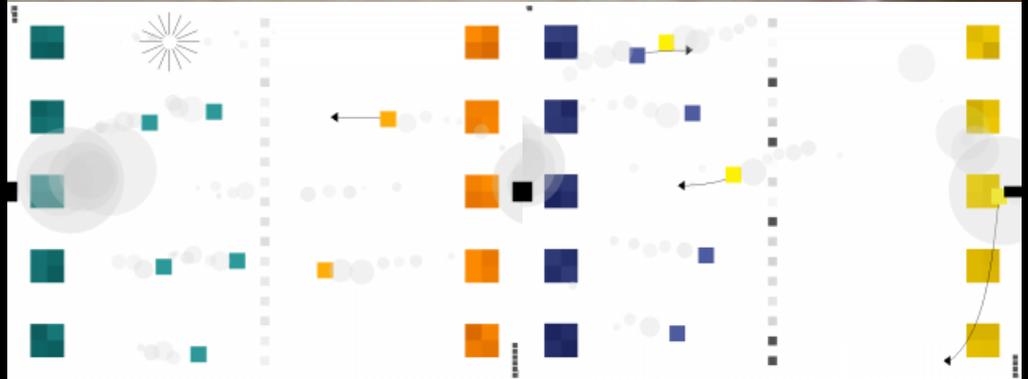
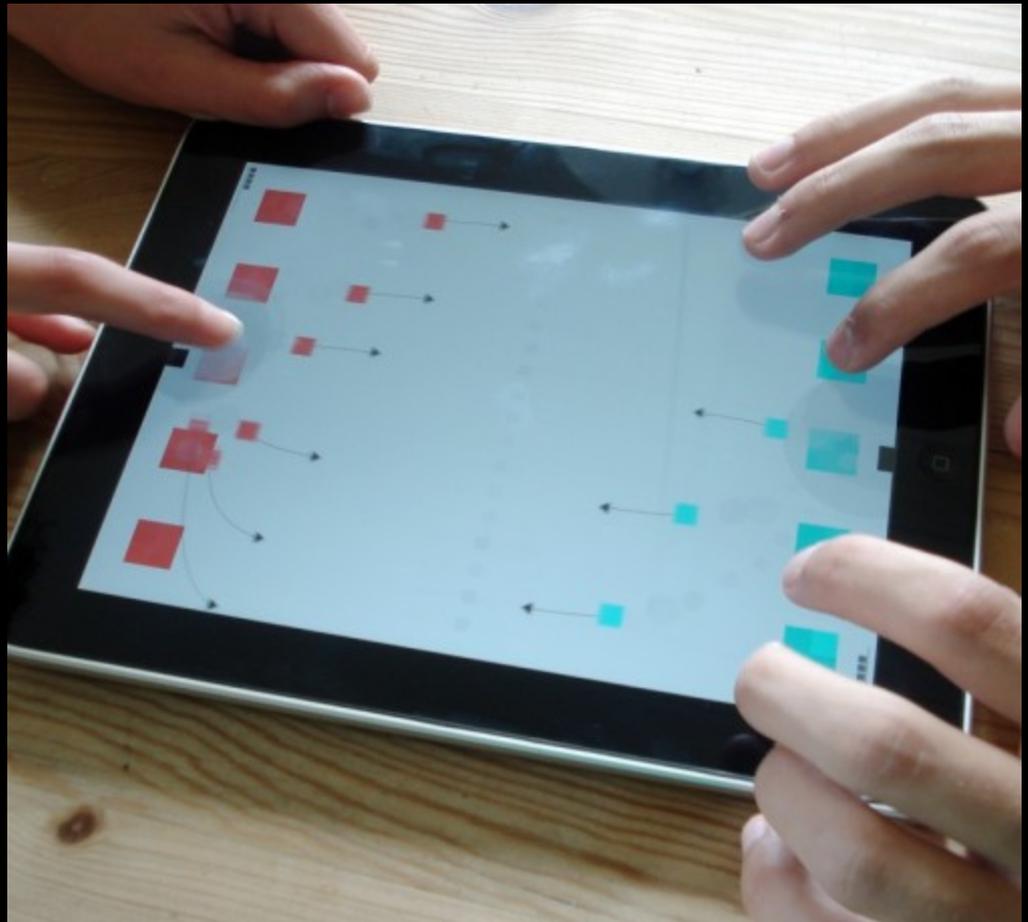
Created By: Erik Svedang

Using: openFrameworks, CFXR for sound effects

General Idea:

Great for playing an interactive, competitive game with friends. Goal is to destroy the five squares on the other side via firing ammunition from your own squares.

Source: <http://www.creativeapplications.net/games/shot-shot-shoot-iphone-games-of/>



Halcyon

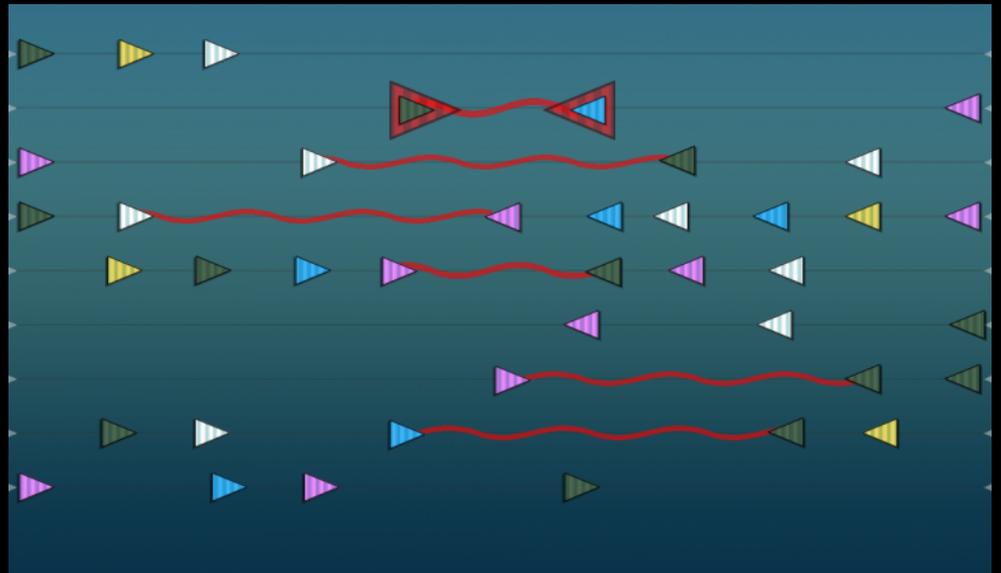
Created By: Zach Gage, Kurt Bieg

Using: openFrameworks

General Idea:

“Marriage of a generative musical instrument and a game” where all the sounds are generated based on a chord. When a chord is strummed when touched or when a piece moves between them, a sound is generated.

Source: <http://www.creativeapplications.net/games/halcyon-ipad-games-of-preview/>



Objective C / C++ Specific Games

Limbo

Created By: Playdead

Using: Game Engine written in C++ with architecture made for multiple platforms

General Idea:

2D sidescroller incorporating physics system Box2D to govern environment and player character. Storyline involves guiding a boy through dangerous environment and traps to search for his sister while avoiding death.

Source: <http://www.creativeapplications.net/games/limbo-games/>



Chasing Aurora

Created By: Broken Rules

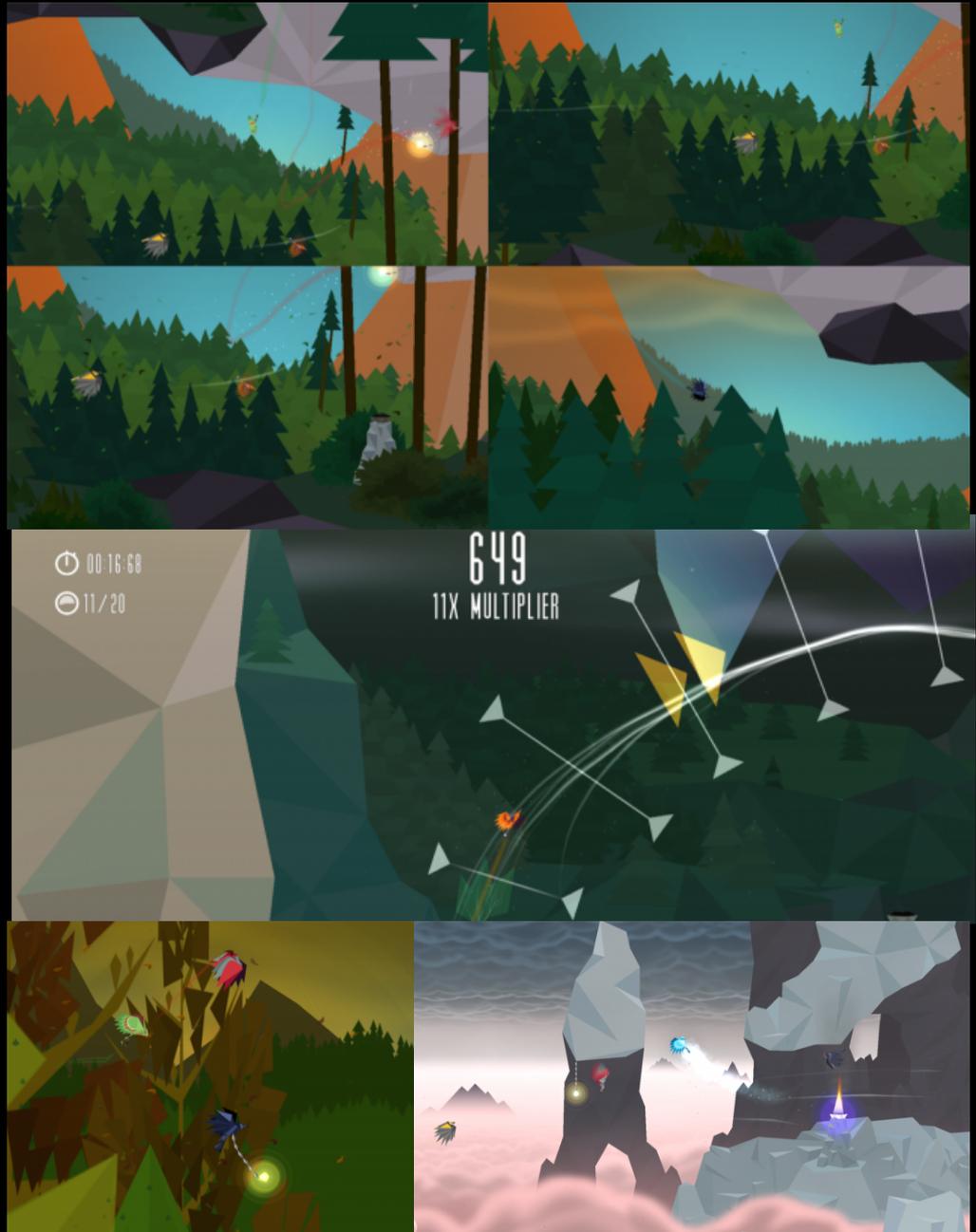
Using: Ginkgo, Broken Rules' in-house game engine developed with C++ and C using Box2D and OpenGL rendering

General Idea:

2D aerial action game that features single-player and multi-player mode up to 5 people. Single-player mode involves a bird-flying racing game while multi-player mode is based on a game of "tag."

Developers' Video: http://www.youtube.com/watch?feature=player_embedded&v=qPbyRJeHhkk

Source: <http://www.creativeapplications.net/games/chasing-aurora-2d-aerial-action-game-by-broken-rules/>



Link and Spell

Created By: Ramin Afshar

Using: Objective-C and Cocos2D

General Idea:

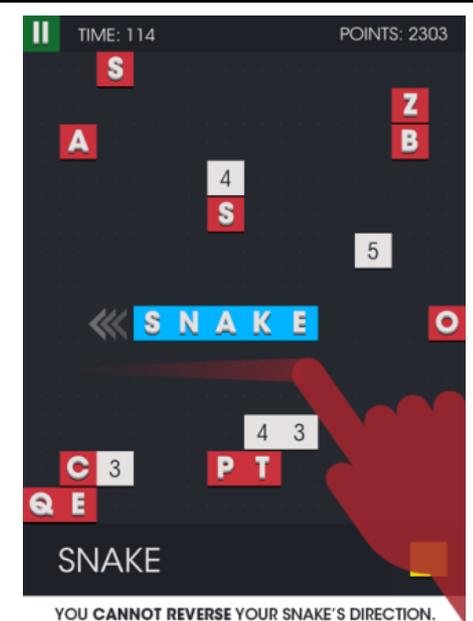
Mash-up of classics: “Snakes” and “Scramble”

Gesture-based where player eats the letters to form words and to earn points and time.

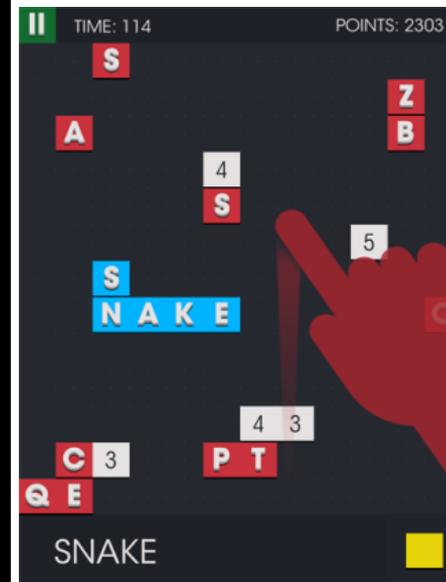
Source: <http://www.creativeapplications.net/games/link-and-spell-ios-word-game-with-a-snakescrabble-twist/>



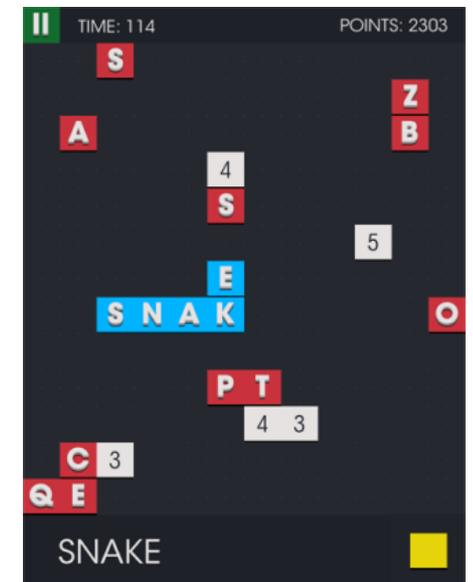
DOUBLE TAP ANYWHERE TO COMMIT YOUR WORD. VALID WORDS EARN YOU POINTS, EXTRA TIME AND CLEAR THE PLAYFIELD FROM WHITE TILES.



YOU CANNOT REVERSE YOUR SNAKE'S DIRECTION.



CHANGE THE SNAKE'S DIRECTION BY SWIPING. AVOID HITTING THE WHITE TILES AND STAY WITHIN THE PLAYFIELD BOUNDS.



FORM WORDS BY EATING THE RED LETTERS THAT SPAWN ON THE PLAYFIELD

Journey

Created By: Thatgamecompany

Using: PhyreEngine Game Engine (C#)

General Idea:

Go through a journey through different environments. Other anonymous players on the same journey can be discovered and two players may assist each other, but cannot communicate via speech or text. Only form of communication is via a musical chime.

Source: <http://www.playstationlifestyle.net/2011/03/03/sony-announces-phyreengine-3-0-brings-ngp-support/>



Other Uses for OpenFrameworks

Tunetrace

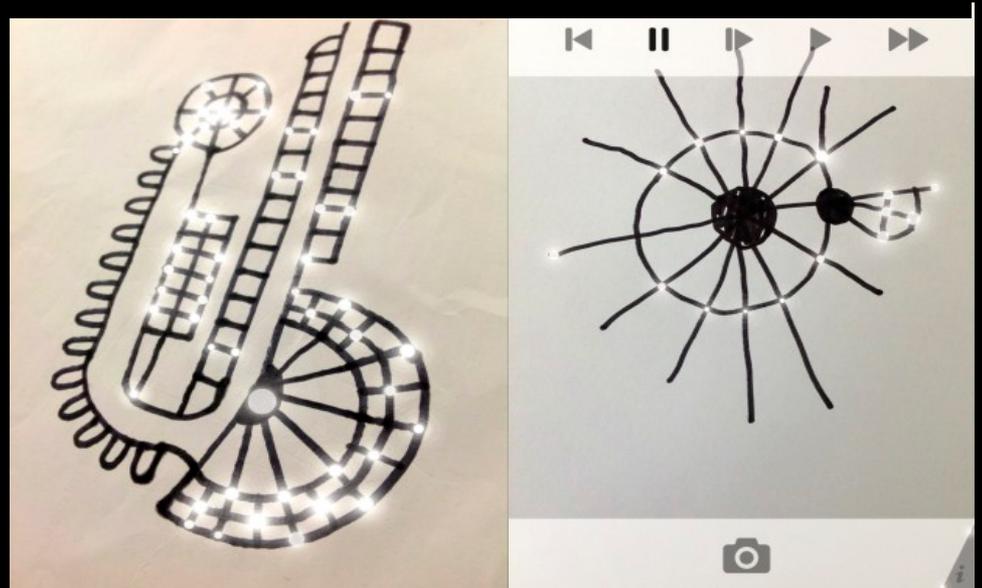
Created By: Ed Burton

Using: OpenFrameworks, OpenCV

General Idea:

Innovative means for music development.
Photograph a real image drawings, reduces them to polylines, and uses them as paths for different tunes.

Source: <http://www.creativeapplications.net/sound/tunetrace-ios-app-by-ed-burton-converts-drawings-to-music/>



RAM

(Reactor for Awareness in Motion)

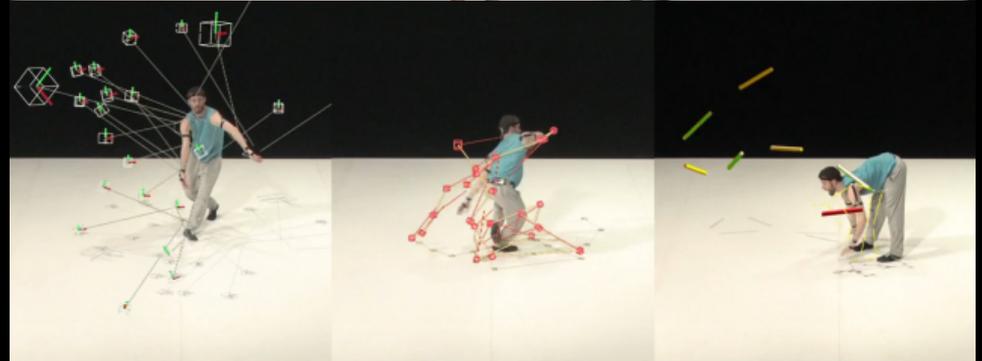
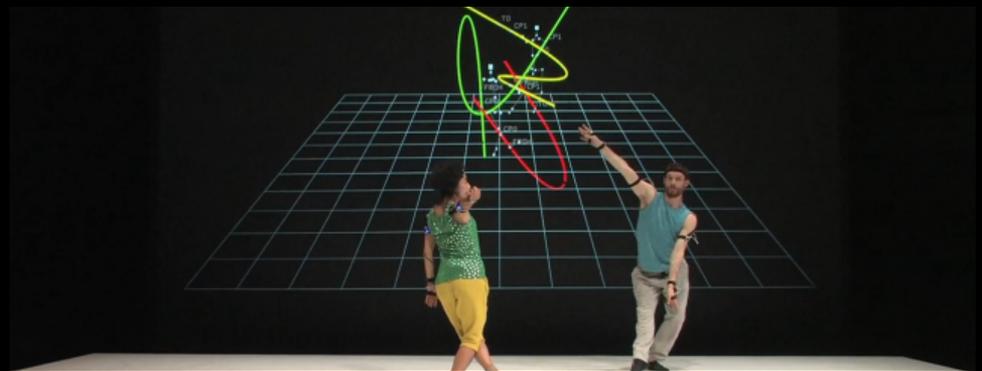
Created By: Yoko Ando and YCAM

Using: RAM Dance Toolkit using
openFrameworks

General Idea:

Toolkit to create environment for dancers.
Contains a GUI and functions to access,
recognize, and process motion data to support
creating of various environment scene and give
real-time feedback to dancers

Source: [http://www.creativeapplications.net/
environment/reactor-for-awareness-in-motion-
ram-by-yacam-download/](http://www.creativeapplications.net/environment/reactor-for-awareness-in-motion-ram-by-yacam-download/)



Arcs 21

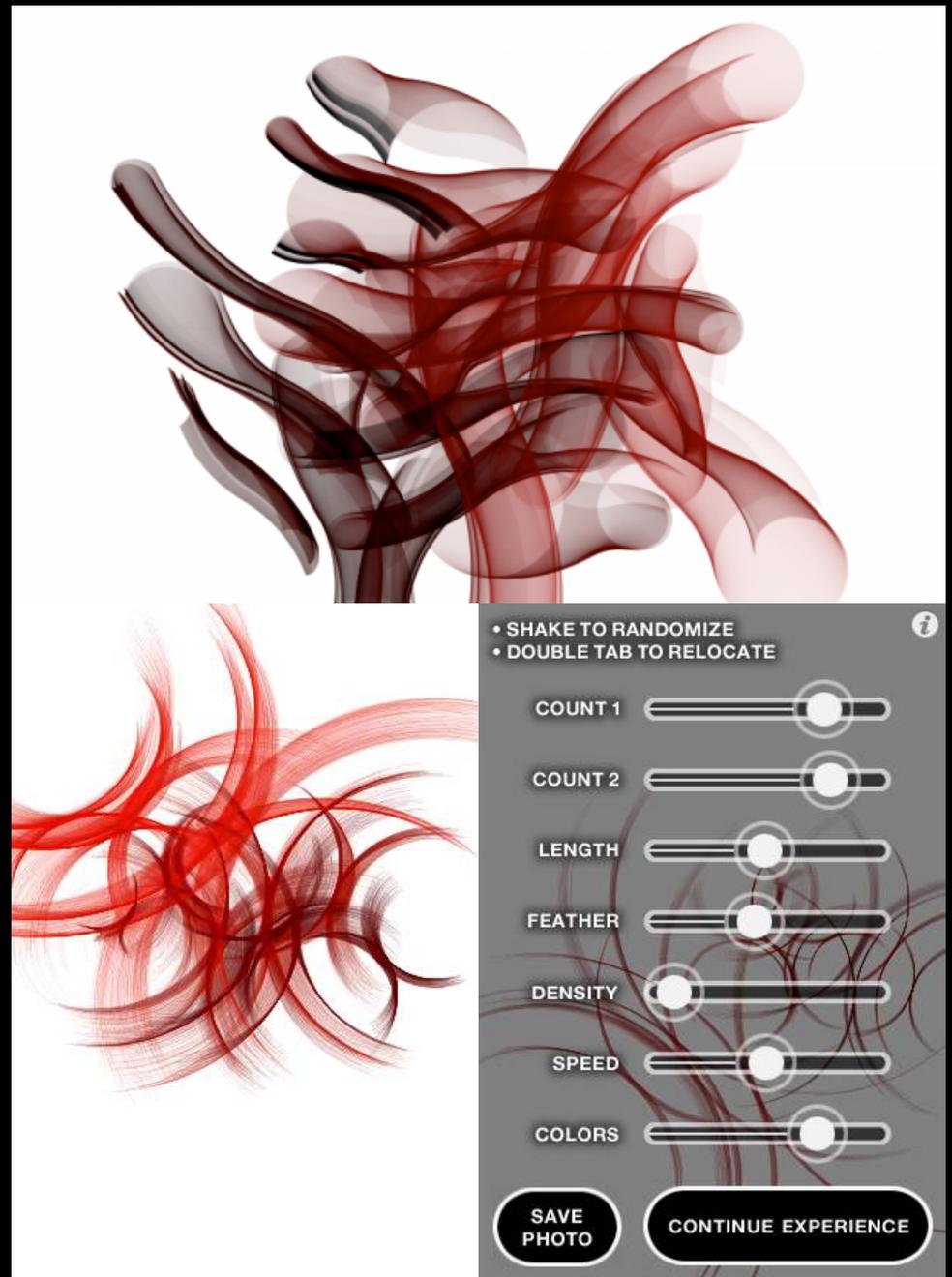
Created By: Lia

Using: Originally Processing; Ported to iPhone via openFrameworks

General Idea:

Interactive, generative online application to support real-time artwork of the abstract nature.

Source: <http://www.creativeapplications.net/iphone/arcs-21-iphone-processing-of/>



Sniff

Created By: Karolina Sobecka, Jim George

Using: openFrameworks, Unity3D

General Idea:

Interactive public projection on storefront window where approaching passers-by 'behavior are analyzed and an animated dog reacts accordingly while forming a relationship based on history of interaction

Source: <http://www.creativeapplications.net/openframeworks/sniff-openframeworks/>



EyeWriter

Created By: Graffiti Research Lab, The Ebeling Group, Zach Lieberman, Tony Quan, Chris Sugrue, Theo Watson, Evan Roth, James Powderly

Using: openFrameworks

General Idea: Provide a low-cost eye-tracking apparatus and custom software to enable graffiti writers and artists with paralysis to draw using only their eyes.

Source: <http://www.creativeapplications.net/openframeworks/eyewriter-openframeworks/>

