4 DAY INTERACTIVE SOFTWARE INTENSIVE WORKSHOP
with visual artist, performer & designer jamie griffiths (UK/Canada)

Setting up an interactive performance system with Isadora & JunXion software, handheld wireless controllers, video, sound and responsive lighting.

"[Jamie's work] is some of the best visual design work I have ever seen done with Isadora"
Mark Coniglio. Creator of Isadora Software

This four day intensive workshop with jamie griffiths is a fast-track entry into interactive performance design. Whether you are a visual artist creating museum installations, vj, dj, singer, musician, lighting designer, performance artist, choreographer or film-maker, the workshop frees you up from perceived programming limitations and gives you the skills you need to start experimenting with interactive live performance designs using Isadora software to harness the power of simple tools for design and control of your new media and interdisciplinary ideas. Participants with laptops and Wii controllers (or iPOD Touch) build Isadora software patches as they go through the workshop, ending up with standalone performance 'patches' to take away with them, that can run in the free demo version of Isadora on either Mac or PC platforms. The objective of the workshop is to introduce participants to the use of Isadora software as an interactive performance tool and to guide them towards its use in their own work. No previous programming experience is required. Isadora is graphical programming software that you build up with modules, without needing to learn complex programming languages.

Jamie offers 6 months of follow up email consultations for all workshop participants and one-on-one consultation sessions throughout the workshop process.

DAY ONE: Introduction to Concepts & Softwares
DAY TWO: Handheld Controllers, Video Processing & Audio Triggers
DAY THREE: Control Panels, Plugins & Interactive Lighting
DAY FOUR: Camera Tracking, Live Text & Participant Presentations

DAY ONE: Introduction to Concepts & Softwares

Interactive Performance & Design: jamie griffiths artist talk & introduction to contemporary interactive design concepts. Demonstration of Isadora software patches in action. Understanding Interactive Design. What does it mean to work with computers in a live design? What are we trying to achieve? From multi-media to interactive... what is the difference? Synaesthesia (crossing over of the senses) in art performance. Visual design, choreography, stage design, lighting... film as sound, imagery as music.

Creative Use of Graphical Programming softwares: What can Isadora do for you and how can you use it creatively? Discussion of other related softwares such as Max/Msp & Jitter, Processing and PureData.

Introduction to Isadora software & terminology. The basics, & how to reach beyond them. Finding your way around a basic Isadora software patch.

Setting up equipment (hardware): Technical set up of computer hardware inputs/outputs for video, audio and lighting. Participants assist with setting up the hardware, from a working technical sketch. Laptop, video projector, DV camera & Lanbox.

Live inputs: Live video (cameras) & audio (microphones) and MIDI data. Software settings for live video and sound input. Optimizing tips for video processing speed. How to 'sweeten' the numbers using mathematical & control actors.

Introduction to Data, Video and Audio Processing: Real-time effects, multi-layering, feedbacks, multiple video outputs to projectors or monitors, live streaming of data over the internet. Using generator actors.

Connectivity & Networked Performance: Control multiple computers running Isadora across networks. Connecting to other laptops via ethernet hub and other options for sharing information between computers/artists.

Creative Assignment #1: The last hour of each day is reserved for creative exploration as a group assignment. These are carried out in 4 small groups (3 participants to each group). Assignment #1: *Experiments with numerical creativity in Isadora.*

DAY TWO: Handheld Controllers, Video Processing & Audio Triggers

Review & Troubleshooting: Time set aside for questions or troubleshooting of techniques or ideas from day one.

Group Presentation of Creative Assignment #1

Handheld controllers & Isadora:
Set up Wii controller or iPOD Touch to talk to Isadora
Introduction to intermediary softwares, JunXion & OSCulator.
Converting hand gestures to MIDI signals.
Sending the MIDI data to Isadora
Controlling audio & video with your hand controller.

Video Processing : Using the **Video processing** 'actors' built into Isadora.

Live video capture using a Wii controller or iPOD Touch.

Sound trigger/s Setting up Isadora to listen directly to the pitch or volume of live sound inputs. Tuning frequency and pitch triggers.
Setting up JunXion for pitch analysis.

Creative Assignment #2: *Creation of an Isadora patch using a handheld controller to trigger sound & video events in Isadora, with one additional event triggered by camera tracking.*

DAY THREE: Control Panels, Plugins & Interactive Lighting

Review & Troubleshooting: Time set aside for questions or troubleshooting of techniques or ideas from day two.

Group Presentation of Creative Assignment #2

Custom User Actors Creating custom User Actors saves you time, screen space and & streamlines your patches. You can build your own 'actor' inside a new dialogue window that then becomes nested in your scene. Add it to the actor toolbox and reuse again and again. Share user actors on the Isadora user forum.

Control Panels: Build a custom control panel for your Isadora patch, with onscreen sliders, knobs, dials, trigger buttons etc Ideal for public installations since the guts of

the design are hidden, locked and passworded to prevent the public from stealing your ideas or accidentally altering your design.

External Plugins for Isadora: Harnessing the power of external plugins, such as FreeFrame & Quartz Composer. CoreVideo and CoreAudio on a Mac.

Lanbox & interactive DMX lighting. Setting up the Lanbox and creating an Isadora patch to control DMX theatre lights.

Discussion: Does it matter if the technology is understood by the audience?
Collaboration between the disciplines. Who is in control?
Video designers versus Lighting Designers?

Creative Assignment #3: *Create a Control Panel for Assignment 2*
Add FreeFrame processing actors and interactive lighting triggers.

DAY FOUR: Camera tracking, live text & presentations

Review & Troubleshooting: Time set aside for questions or troubleshooting of techniques or ideas from day three.

Group Discussion: Taking the workshop skills further into the participants own disciplines. Each participant has the opportunity to present their own ideas, questions and design concerns or ideas to the class and the instructor for feedback.

Camera tracking of a moving object (hand) in Isadora: Using the hand as an example, we set up a patch that can watch & analyze the motion and location of your hand. Collecting data, or 'seeing' to create an image from the live feed? Lighting the hand. Physical movement for the camera. Devising a plan for tracking moving objects. Camera types. Pros and cons.

Text Actors in Isadora: Creating live feed of text versus pre-recorded clips of text.

Creative Assignment #4: *Trigger live text & add camera tracking to Creative Assignment 3*

Participant presentations of Creative Assignment 4 to a small invited audience.
(friends & colleagues of participants & staff of the facility)