

UPDATED JUNE 6TH!

# TROIKATRONIX ISADORA:WERKSTATT BERLIN 2019

THE CREATIVITY SERVER

THE INTERNATIONAL GATHERING OF **ISADORA** CREATORS + DESIGNERS  
UFERSTUDIOS BERLIN, **14-17 AUGUST**

WORK  
SHOPS

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EVENTS

## Isadora Werkstatt 2019

### WELCOME TO ISADORA WERKSTATT 2019!

Jump into the pool! Join us as we splash out with the launch of Isadora 3 and take deep dives into projection mapping, animation, motion tracking, and interfacing with third-party software and hardware. Our main swim instructor, Isadora creator Mark Coniglio, will guide you through the brand-new features in Isadora 3, and we'll take a behind-the-scenes look at inspiring projects created by Isadora experts. As always, there will be an introductory course for Isadora beginners and advanced courses on working with Arduino, body tracking, live video capture, 360-degree video, and how to use MIDI Show Control, ArtNet, and DMX.

We offer more swimming lanes, too! We've focused and expanded the schedule to offer more opportunities for learning and exchange with the TroikaTronix Team and the Isadora Community. The Creative Space has scaled up with more activities so everyone, including our experts, can mingle and explore the possibilities of your projects. Don't worry about getting into every course you want. You can still learn and grow with our Creative Space, where we've provided a playground of equipment, access to the TroikaTronix Team, and more.

Finally, we'll top off four days of creativity with the Isadora Werkstatt Showcase, where innovative works-in-progress made during the workshops will be featured and experiments from the Creative Space can be shared with the community!

### CREATIVE SPACE

Guess what? We listened to your feedback and realized that one of the most valuable resources available at the Werkstatt is the Isadora Community itself. There's always more to learn or show someone else, especially when this many Isadora Users gather in one place. That's why we're ramping up community engagement so you'll have more time to explore your own ideas and exchange knowledge with others—between workshops and any time you are not in a workshop as well. This year's Creative Space will be set in Studio 13 (the foyer space outside the Studio 14 theater). It will be an open space to rest and recharge, jump into or start teaching a pop-up mini-workshop, team up on projects, or make use of the hardware in the Izzy playground (including projectors, so you can experiment and practice your mapping skills). Get those creative juices flowing! Make some new friends or put a face to those names from the forum. Ask and answer questions, share tips, techniques, patches, and hardware recommendations. (Bring your toys!) Want to talk through an idea for a design? Need some help figuring out technical aspects of a project? Want to meet up to collaborate with Isadora Users from around the globe on a piece for the Isadora Werkstatt Showcase? This IS the place! Members of the TroikaTronix Team will also be on hand to assist (if you're lucky, you might even catch Mark himself), so bring your ideas, artistry, gear, and passion to the Creative Space and work together with the rest of the Isadora Community.

# Overview

This calendar is accurate as of 6 June 2019 – but things change!

Please check our website for the most recent informaton on the Isadora Werkstatt [www.troikatronix.com/Werkstatt2019](http://www.troikatronix.com/Werkstatt2019)

		10 am	11 am	12 pm	1 pm	2 pm	3 pm	4 pm	5 pm	6 pm	7 pm	8 pm
Wednesday 14 August	Isadora 101: An Intensive Introduction for New Users (part 1 of 3)	Studio 6										
	Loopstation (part 1 of 2)	Studio 9										
	Composition and the Hybrid Instrument/Interface	Studio 1										
	Generating Content: Isadora as a Generative Video Tool (part 1 of 2)	Seminar Room										
	Getting the Most from Isadora 3	Studio 14										
	Izzymation						Studio 6					
	Loopstation (part 2 of 2)						Studio 9					
	Technician's Crash Course						Studio 1					
	Generating Content: Isadora as a Generative Video Tool (part 2 of 2)						Seminar Room					
	Reverse Engineering Isadora						Studio 14					
Mark Coniglio's Keynote										Studio 14		
Thursday 15 August	Isadora 101: An Intensive Introduction for New Users (part 2 of 3)	Studio 6										
	MIDI Show Control Freak: Isadora, QLab, and Lighting Consoles	Studio 9										
	Talking to Lights; DMX, Artnet, and Pixel Mapping	Studio 1										
	Isadora and Ableton Live	Seminar Room										
	Integrated Tracking and Interactive Control with Blacktrax	Studio 14										
	Going Live: Working with Live Video Capture in Isadora						Studio 6					
	IzzyMap Basics						Studio 9					
	Technician In-Depth Training: Creating Redundant Isadora Systems						Studio 1					
	Extending Media – Analog to Digital and Back (part 1 of 2)						Seminar Room					
	Getting the Most from Isadora 3						Studio 14					
Show & Tell										Studio 14		
Friday 16 August	Isadora 101: An Intensive Introduction for New Users (part 3 of 3)	Studio 6										
	Make Gyver (part 1 of 2)	Studio 9										
	IzzyMap Intermediate	Studio 1										
	Extending Media – Analog to Digital and Back (part 2 of 2)	Seminar Room										
	What You Do with the Data	Studio 14										
	Body Tracking						Studio 6					
	Make Gyver (part 2 of 2)						Studio 9					
	Talking to Lights; DMX, Artnet, and Pixel Mapping						Studio 1					
	ABC of OSC and MIDI						Seminar Room					
	Isadora Quick & Dirty						Studio 14					
Professional Practice Bridging Worlds										Studio 14		
Saturday 17 August	Body Tracking	Studio 6										
	IzzyMap Basics	Studio 9										
	Very Real Environments; Working with 360 Video and Images	Studio 1										
	Isadora in Rehearsals	Seminar Room										
	Why do we do what we do?	Studio 14										
	Creative Space and final preparation for the Werkstatt Showcase.						Studio 13 and others					
Werkstatt Showcase										Studio 14		

## Wednesday Morning, 14 August 2019

WORK  
SHOP

### • **ISADORA 101: AN INTENSIVE INTRODUCTION FOR NEW USERS** • *(part 1 of 3)* • •

**TEACHER** **Montgomery C Martin**  
**TIME** **10 am – 1 pm**

**LEVEL** Beginner. This workshop is open to participants of all experience levels; however, preference will be given to beginners.

**DESCRIPTION** In this hands-on workshop, you will learn how to use the core features of Isadora, the award-winning live media presentation tool created by Troika Ranch artistic director Mark Coniglio.

You will be introduced to the basic setup, functionality, and operation of Isadora and its associated tools. You'll create interactive digital projections, manipulate video and audio, work with a live video camera feed, and much more. We will analyze prominent examples of Isadora in practice to examine how dramatic composition is used when digital assets, scenic elements, and live performers interact. During the workshop, you'll work together to create a "prototype" Isadora control patch that you can use to quickly improvise, manipulate, and create interactive media for future projects.

**REQUIREMENTS** Laptop (PC or Mac) which meets the minimum system requirements for Isadora 3, including a functioning webcam and microphone. Temporary Isadora 3 licenses will be provided for users who do not yet own the software.

## Wednesday Morning, 14 August 2019



### • **LOOPSTATION** • *(part 1 of 2)* • •

**TEACHER** Clemens Kowalski and Oscar Loeser

**TIME** 10 am – 1 pm

**LEVEL** Intermediate

**DESCRIPTION** Learn how to use Loopstation—a live, visual set instrument—to set up an interplay of visuals, OSC, and your creativity to produce fresh ways of live performance.

AVK4 (Kowalski and Loeser) have developed a user interface that blends manipulation of real material with the rhythm of music and space. Derived from electronic music, loops are the crucial element of the Loopstation. This instrument creates a loop of five layered live-recorded images (videos or photos), which can be mixed and manipulated with velocity and other effects. New imagery can only be added by replacement. The replaced loop is deleted and not saved. Inspired by Oskar Fischinger and Hans Richter, this approach rethinks analog visuals in live contexts.

**REQUIREMENTS** Laptop with cam and torch. Also, have a light desk, OSC-compatible device (tablet).

**Wednesday Morning, 14 August 2019**

WORK  
SHOP

• **COMPOSITION AND THE HYBRID INSTRUMENT/INTERFACE:  
• A HANDS-ON COLLABORATIVE EXPLORATION OF THE BOUNDARIES  
• BETWEEN COMPOSITION, INSTRUMENT, AND INTERFACE**

TEACHER

**Ian Winters**

TIME

**10 am - 1 pm**

LEVEL

Intermediate suggested, but no one turned away. Open to anyone who is comfortable with (or recently acquired knowledge) of physical computing and interfaces, and/or a background in composition (music, performance, gaming).

DESCRIPTION

We will work with a range of nontraditional (and traditional) physical interfaces such as cameras, sensors, and custom controllers to prototype hybrid interfaces/software instruments that blur the boundary between analog and digital.

Every patch has a thousand options and every controller for every patch has a thousand decisions in its making. We will work collaboratively with a range of nontraditional (and traditional) physical interfaces to expand the range of audio/visual/performative action while still being connected to the work at hand. We'll utilize all of the available tools of the Werkstatt, and the physical computing tools developed in the first sensor workshop, to create prototypes of new interfaces and audiovisual instruments to be deployed in late evening compositions by the Werkstatt community.

REQUIREMENTS

Please bring existing (simple) physical computing or camera/sound/motion patches for a live interaction that you want to use to explore compositional possibilities.

## Wednesday Morning, 14 August 2019

WORK  
SHOP

### • **GENERATING CONTENT: ISADORA AS A GENERATIVE VIDEO TOOL**

• (part 1 of 2)  
•  
•

TEACHER **Ryan Webber**  
TIME **10 am – 1 pm**

LEVEL Intermediate to Advanced.

DESCRIPTION A hands-on workshop that gets you working with Isadora's huge toolset to create original generative content.

We will explore 2D and 3D generative tools and the use of external data sources, Javascript, and sensor data to drive generative creation. In addition, we will create User Actors that allow us to add "instances" of a design element into the render pipeline and look at methods of controlling these "instances." A number of demo files will be provided with code examples as well as User Actors that can be reused in your own projects.

By the end, you will understand the options available to you in Isadora for the creation of generative content, be able to structure User Actors to work with available data sources, and be able to utilize user input to control your generative designs.

REQUIREMENTS Laptop  
Participants should be familiar with creating and using User Actors and should have some experience with Javascript. Please make sure you have completed the following recommended TroikaTronix Javascript tutorials online:

Getting started with Javascript → <http://bit.ly/2QiaKJP>

How to load external data with Javascript → <http://bit.ly/2wgiela>

Grouping, Ungrouping, and Passing JSON values with Javascript → <http://bit.ly/2QhKiA8>

**Wednesday Morning, 14 August 2019**



## **GETTING THE MOST FROM ISADORA 3**

*Lecture also offered Thursday, 3 - 6 pm*

**TEACHER**      **Mark Coniglio**  
**TIME**            **10 am - 1 pm**

**LEVEL**            All are welcome!

**DESCRIPTION**    A special, behind-the-software lecture on Isadora 3's many new features and, in particular, its video workflows.

Isadora 3 has opened the door for far more sophisticated video workflows using the new Stage Setup editor. Mark will explain and demonstrate all of Isadora 3's new features, starting with Stage Setup and its new edge blending workflow as well as the powerful new Virtual Stages feature. He'll show you how to move video around using Syphon/Spout, Blackmagic, and NDI output, as well as using timecode with the Movie Players and more. Beyond explaining the basics, Mark will take you to the next level to show how these features can expand your creative horizons.

**REQUIREMENTS**    Laptop and some video media that is ready to play.

## Wednesday Afternoon, 14 August 2019



### IZZYMATION

**TEACHER** **Eni Brandner**

**TIME** **3 – 6 pm**

**LEVEL** Beginner. However, Intermediate and Advanced Isadora users who are not familiar with animation may also benefit from this workshop.

**DESCRIPTION** Looking at different ways of animation and producing loops. This session will provide you with the tool of animation as an additional skill set to use for your process of creation. You will also learn how much time it takes to apply animation to your projects.

In the first part of the workshop, we will explore basic techniques of animation and I will show a few examples to give participants inspiration for what technique they might choose to work with. I will explain how to create stop-frame animation loops, which can be used as material for generating more complex visual content, and pixelation technique (stop frame animation with performers/actors).

In the second part, we'll divide up into smaller groups to create loops or short pixelations that will be integrated into Isadora—using things like the wave generator, 3D particle actor, or sensory input—to find ways to create material that you can use in a performative context.

**REQUIREMENTS** Bring an external camera and tripod if possible (we have a few provided) as well as objects you'd like to animate. Also, if available, an iPad or other iOS device with apps like Animatic or Animation Desk (free animation apps) installed.

## Wednesday Afternoon, 14 August 2019



### • **LOOPSTATION** • (part 2 of 2) •

**TEACHER** Clemens Kowalski and Oscar Loeser  
**TIME** 3 – 6 pm

**LEVEL** Intermediate

**DESCRIPTION** Learn how to use Loopstation—a live, visual set instrument—to set up an interplay of visuals, OSC, and your creativity to produce fresh ways of live performance.

AVK4 (Kowalski and Loeser) have developed a user interface that blends manipulation of real material with the rhythm of music and space. Derived from electronic music, loops are the crucial element of the Loopstation. This instrument creates a loop of five layered live-recorded images (videos or photos), which can be mixed and manipulated with velocity and other effects. New imagery can only be added by replacement. The replaced loop is deleted and not saved. Inspired by Oskar Fischinger and Hans Richter, this approach rethinks analog visuals in live contexts.

**REQUIREMENTS** Laptop with cam and torch. Also, have a light desk, OSC-compatible device (tablet).

## Wednesday Afternoon, 14 August 2019



### TECHNICIAN'S CRASH COURSE

**TEACHER** Michel Weber and L Wilson-Spiro  
**TIME** 3 – 6 pm

**LEVEL** Beginner

**DESCRIPTION** For theater technicians who want to use Isadora for: surtitles, utilizing smartphones as a wireless live-feed video source or controller, interfacing with Blackmagic video capture devices for a wired live feed video source, and capturing a window from an application—like Skype—to use as a video source.

We'll also show you a few other handy tricks such as a short introduction to Isadora's MIDI Show Control cueing capabilities; how to use a wireless mouse as a cheap and easy cueing trigger for rehearsals and pieces where your performers are the ones triggering Isadora; how to convert Powerpoint surtitles to Isadora as text for performances; and how to use a laptop to get up close and personal with your mapping surface in order to fine-tune your mapping.

**REQUIREMENTS** *Required:* Wi-Fi-capable Mac or Windows 10 laptop that meets the Isadora system requirements with Isadora 3 (free), Epoccam (free), TouchOSC Editor (free), and Syphon+Syphoner (free - Mac) installed. Android Smartphone or iPhone with Epoccam (free), JustWifiCam (free - Mac), and TouchOSC (\$4.99) installed.

*Optional:* Airbeam Pro (\$3.99 - iPhone+Mac), NewTek NDI Camera (~\$20 - iPhone+Mac), and NewTek NDI (\$20 - Android+Windows).

*Recommended:* A wireless mouse, a Nintendo Wii Remote (~\$20) + OSCulator (~\$20 - Mac), and a Blackmagic capture device + compatible video camera and the necessary cables.

## Wednesday Afternoon, 14 August 2019

WORK  
SHOP

### • **GENERATING CONTENT: ISADORA AS A GENERATIVE VIDEO TOOL**

• (part 2 of 2)  
•  
•

TEACHER **Ryan Webber**  
TIME **3 – 6 pm**

LEVEL Intermediate to Advanced

DESCRIPTION A hands-on workshop that gets you working with Isadora's huge toolset to create original generative content.

We will explore 2D and 3D generative tools and the use of external data sources, Javascript, and sensor data to drive generative creation. In addition, we will create User Actors that allow us to add "instances" of a design element into the render pipeline and look at methods of controlling these "instances." A number of demo files will be provided with code examples as well as User Actors that can be reused in your own projects.

By the end, you will understand the options available to you in Isadora for the creation of generative content, be able to structure User Actors to work with available data sources, and be able to utilize user input to control your generative designs.

REQUIREMENTS Laptop  
Participants should be familiar with creating and using User Actors and should have some experience with Javascript.

Please make sure you have completed the following recommended TroikaTronix Javascript tutorials online:

Getting started with Javascript → <http://bit.ly/2QiaKJP>

How to load external data with Javascript → <http://bit.ly/2wgjela>

Grouping, Ungrouping, and Passing JSON values with Javascript → <http://bit.ly/2QhKiA8>

## Wednesday Afternoon, 14 August 2019



### REVERSE ENGINEERING ISADORA

**MODERATOR** **Montgomery C Martin**  
**PARTICIPANTS** **Participating artists will be announced shortly**  
**TIME** **3 – 6 pm**

**LEVEL** All are welcome!

**DESCRIPTION** Get inspired and informed as Isadora super users share their most exciting and innovative projects. These adventurous artists will offer a glimpse into their creative process, breaking down what they did and how they did it, to show you the technical and creative dramaturgy behind their work. You will get the chance to pose specific questions during a Q&A.

## Wednesday Evening, 14 August 2019

### EVENT • **MARK CONIGLIO'S KEYNOTE**

**TIME** 7:30 – 8:30 pm

**DESCRIPTION** With the introduction of Isadora 3, we took another step forward ensuring that Isadora remains one of the most accessible tools for empowering interactive stage performances. Isadora creator, media artist, and composer Mark Coniglio will launch this year's Werkstatt with a lively presentation about Isadora's continued development, where the software and the community stands now, and where we see ourselves going in the future. He will close by explaining how you can take part in the bigger process we've envisioned for this Werkstatt, where the community—meaning YOU!—presents their artwork on the final night of the Werkstatt.

## Thursday Morning, 15 August 2019



### • **ISADORA 101: AN INTENSIVE INTRODUCTION FOR NEW USERS**

• *(part 2 of 3)*

#### TEACHER TIME

**Montgomery C Martin**  
**10 am – 1 pm**

#### LEVEL

Beginner. This workshop is open to participants of all experience levels; however, preference will be given to beginners.

#### DESCRIPTION

In this hands-on workshop, you will learn how to use the core features of Isadora, the award-winning live media presentation tool created by Troika Ranch artistic director Mark Coniglio.

You will be introduced to the basic setup, functionality, and operation of Isadora and its associated tools. You'll create interactive digital projections, manipulate video and audio, work with a live video camera feed, and much more. We will analyze prominent examples of Isadora in practice to examine how dramatic composition is used when digital assets, scenic elements, and live performers interact. During the workshop, you'll work together to create a "prototype" Isadora control patch that you can use to quickly improvise, manipulate, and create interactive media for future projects.

#### REQUIREMENTS

Laptop (PC or Mac) which meets the minimum system requirements for Isadora 3, including a functioning webcam and microphone. Temporary Isadora 3 licenses will be provided for users who do not yet own the software.

## Thursday Morning, 15 August 2019

WORK  
SHOP

### • **MIDI SHOW CONTROL FREAK: ISADORA, QLAB, AND LIGHTING CONSOLES**

**TEACHER** L Wilson-Spiro

**TIME** 10 am – 1 pm

**LEVEL** Advanced. Participants must either be high-level Isadora users or have a basic understanding of Isadora in addition to theatrical lighting consoles and/or QLab.

Helpful but not required:

Advanced understanding of an ETC Ion and/or QLab

Basic/advanced understanding of MIDI Show Control, computer networking, and User Actors, Control Panels, and Broadcaster/Listener actors in Isadora

**DESCRIPTION** MSC is a cross-platform communication protocol that is used by many programs and control systems. We'll cover how to set up a virtual MIDI network across multiple Mac computers along with basic computer networking tips such as how to set up your show computer in the control booth and remotely accessing the system from the tech table.

You will learn how to use MIDI Show Control (MSC) to allow Isadora to control or be controlled by a lighting console or, QLab, or synch Isadora instances across multiple computers, using a combination of Isadora's native MSC cueing capabilities and a custom-built system (including manual overrides and handy tools for rehearsal).

Please note that while the workshop is open to Isadora users on Windows 10, we will cover interfacing Isadora with QLab, a Mac-only application that is the industry-standard for running sound cues for theater. Nevertheless, the workshop will still contain useful information for attendees running Windows as many other sections of this workshop are cross-platform and a version of the instructor's custom MSC system is available for Windows.

**REQUIREMENTS** Mac or Windows 10 Laptop that meets the Isadora system requirements with Isadora 3 (free), QLab (free - Mac), and TeamViewer (free for personal use) installed. Short-Term Rental: 1-Day Rental QLab 4 License (\$4-\$10 - Mac Only). Helpful but not required: QLab 3 or QLab 4 license.

## Thursday Morning, 15 August 2019



### ISADORA AND ABLETON LIVE

**TEACHER** **Graham Thorne**  
**SPACE** **Seminar Room**  
**TIME** **10 am - 1 pm**

**LEVEL** Beginner. You must know how to import media and show stages in Isadora, what Ableton Live is, and have a basic understanding of MIDI protocols.

**DESCRIPTION** Learn how to sync Ableton Live and Isadora for live sets, installation work, and museum exhibitions. During this session, you will use MIDI controllers and virtual MIDI to communicate between two systems. Perfect for live audiovisual synchronization.

**REQUIREMENTS** Laptop and, if you have one, a MIDI controller/keyboard.

**Thursday Morning, 15 August 2019**



**TALKING TO LIGHTS; DMX, ARTNET, AND PIXEL MAPPING**

*Workshop also offered Friday, 3 - 6 pm*

**TEACHER** **Ryan Webber**  
**TIME** **10 am - 1 pm**

**LEVEL** Intermediate. Participants should have experience with User Actors and Value Scaling.

**DESCRIPTION** Learn how to amplify lighting in your projects for dramatic impact.

Isadora offers a number of ways to add lighting and create incredible effects. We will work with serial connections for passing and receiving DMX, Ethernet connections for working with Artnet, and Isadora's built-in pixel mapping features. You will learn to extract color values from regions of your videos in a number of ways and use this information to control lighting fixtures or addressable LEDs.

**REQUIREMENTS** Laptop along with the ArtNet plugins, plus any adapters you require to connect to Ethernet and USB type A.

**Thursday Morning, 15 August 2019**



## **INTEGRATED TRACKING AND INTERACTIVE CONTROL WITH BLACKTRAX**

**TEACHER**      **Mark Coniglio**  
**TIME**            **10 am – 1 pm**

**LEVEL**            All are welcome!

**DESCRIPTION**    As of August 2019, Isadora 3 will offer integrated support for Blacktrax, the real-time tracking system that allows you to precisely locate a performer in space. During the first half of this lecture, representatives from Blacktrax will give a detailed presentation of their system and its sensory capabilities. During the second half, Isadora's creator Mark Coniglio will join the Blacktrax team, and together they will show you some of the fantastic ways in which Isadora can use Blacktrax's position and orientation data to give you real-time control over video, sound and light. We couldn't be more excited to share the new possibilities that TroikaTronix's strategic partnership with Blacktrax will make possible—don't miss this special lecture presentation!

**Thursday Afternoon, 15 August 2019**



## **GOING LIVE: WORKING WITH LIVE VIDEO CAPTURE IN ISADORA**

**TEACHER** **Montgomery C Martin**  
**TIME** **3 - 6 pm**

**LEVEL** Beginner to Intermediate. Basic experience with Isadora is recommended.

**DESCRIPTION** We'll discuss equipment and methods for live video capture using Isadora—from camcorders and webcams to wireless live feeds, mobile phones, and more.

Learn how Isadora can capture, record, mix, and manipulate live video, and even send video to a livestream broadcast! Then we'll explore how Isadora can manipulate and respond to live video in real time including chroma keying, tracking, and more.

**REQUIREMENTS** Laptop (PC or Mac) which meets the minimum system requirements for Isadora 3. It should have a functioning webcam and microphone. If you can, bring your own video capture equipment or a USB webcam such as a Logitech C920.

## Thursday Afternoon, 15 August 2019



### • **IZZYMAP BASICS**

• *Workshop also offered Saturday, 10 am – 1 pm*

**TEACHER** **Graham Thorne**

**TIME** **3 – 6 pm**

**LEVEL** Beginner. Participants should be able to load videos into Isadora and show stages.

**DESCRIPTION** Learn how to projection map using the built-in IzzyMap feature in Isadora. Make video fit perfectly on to custom shapes and objects in the real world. This powerful tool is great for architectural, DJ booth, and digital set projection mapping.

**REQUIREMENTS** Laptop

## Thursday Afternoon, 15 August 2019

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SHOP

### • **EXTENDING MEDIA – ANALOG TO DIGITAL AND BACK: • A HANDS-ON WORKSHOP INTEGRATING PHYSICAL COMPUTING, • SENSORS, AND ISADORA FOR PERFORMANCE AND INSTALLATION**

*(part 1 of 2)*

TEACHER

**Ian Winters**

TIME

**3 – 6 pm**

LEVEL

Intermediate. Solid knowledge of Isadora; comfortable working with your hands and a soldering iron. Elementary C++ or other programming knowledge helpful but not essential.

DESCRIPTION

A hands-on workshop exploring the basics of working with the world of physical computing and analog to digital sensors of many kinds.

You'll find out how to utilize sound, light, movement, bioelectric fields, heartbeats, etc. as an input to Isadora, and the reverse—Isadora as a control for digital to analog devices such as LED's, relays, speakers, vacuums, and film projectors you can sing to, or even a teapot that sings to you! More concretely, via soldering, we'll assemble a basic Arduino or Arduino-type board and a variety of sensors from parts. Then we'll write the necessary code to have it communicate with Isadora over serial and next, develop an interface patch in Isadora to receive the input and forward on via OSC. If we have extra time, we'll reverse the process and look at ways to have Isadora communicate back to the analog world through a wide variety of D/A mechanisms such as relays and LED drivers.

REQUIREMENTS Laptop

## Thursday Afternoon, 15 August 2019

WORK  
SHOP

### • • • • • **TECHNICIAN IN-DEPTH TRAINING: CREATING REDUNDANT ISADORA SYSTEMS**

#### TEACHER

**Michel Weber**

#### TIME

**3 – 6 pm**

#### LEVEL

Intermediate to Advanced. Participants should have at least a middle knowledge of the control and data actors.

#### DESCRIPTION

Learn how to set up your computer and Isadora to minimize or even eliminate breakdowns during a show. Participants will learn how to take advantage of control and data actors like Data Array, Comparator, and Calculator as well as send Serial Data and others to enable, what we call, a redundant setup.

No computer or software—even if expensive or well coded—is immune to the occasional crash. We'll show you how to make your life easier! If the crash happens, you can watch how Isadora restarts and jumps to the same scene as it was before the crash. What happens is that it will play the scene/video from exactly where it stopped 5-10 seconds after the disaster occurred (time depends on your computer and patch). If you have two computers and a switcher/scaler with a serial or network port, you can reduce the downtime to a few frames. You will learn how to create an automated system where the outage is so short (only a few frames) that the average audience member will likely never notice it.

This part of the automated Isadora restart differs from Mac to PC. PC users will have to download and use a third-party software. Meanwhile, I will go through the steps for Mac users to set this up with MacOS functions.

#### REQUIREMENTS

Laptop

## Thursday Afternoon, 15 August 2019



### GETTING THE MOST FROM ISADORA 3

*Lecture also offered Wednesday, 10 am – 1 pm*

#### TEACHER

**Mark Coniglio**

#### TIME

**3 – 6 pm**

#### LEVEL

All are welcome!

#### DESCRIPTION

A special, behind-the-software lecture on Isadora 3's many new features and, in particular, its video workflows.

Isadora 3 has opened the door for far more sophisticated video workflows using the new Stage Setup editor. Mark will explain and demonstrate all of Isadora 3's new features, starting with Stage Setup and its new edge blending workflow as well as the powerful new Virtual Stages feature. He'll show you how to move video around using Syphon/Spout, Blackmagic, and NDI output, using timecode with the Movie Players and more. Beyond explaining the basics, Mark will take you to the next level to show how these features can expand your creative horizons.

#### REQUIREMENTS

Laptop and some video media that is ready to play.

## Thursday Evening, 15 August 2019

EVENT : **SHOW & TELL**

MODERATOR **MC Ruth Sergel**

TIME **7:30 – 10.30 pm**

DESCRIPTION Show us what you've got!  
You will have six minutes to present your work to the Isadora Community. Share an overview, a favorite project or something that just won't work—we want to see it all! Feeling shy? Stop by anyway to see the wild breadth of what is being created.

Limited presenting slots—sign up starts at orientation. Hope to see you there!

## Friday Morning, 16 August 2019



### • **ISADORA 101: AN INTENSIVE INTRODUCTION FOR NEW USERS** • *(part 3 of 3)* •

**TEACHER** **Montgomery C Martin**  
**TIME** **10 am – 1 pm**

**LEVEL** Beginner. This workshop is open to participants of all experience levels; however, preference will be given to beginners.

**DESCRIPTION** In this hands-on workshop, you will learn how to use the core features of Isadora, the award-winning live media presentation tool created by Troika Ranch artistic director Mark Coniglio.

You will be introduced to the basic setup, functionality, and operation of Isadora and its associated tools. You'll create interactive digital projections, manipulate video and audio, work with a live video camera feed, and much more. We will analyze prominent examples of Isadora in practice to examine how dramatic composition is used when digital assets, scenic elements, and live performers interact. During the workshop, you'll work together to create a "prototype" Isadora control patch that you can use to quickly improvise, manipulate, and create interactive media for future projects.

**REQUIREMENTS** Laptop (PC or Mac) which meets the minimum system requirements for Isadora 3, including a functioning webcam and microphone. Temporary Isadora 3 licenses will be provided for users who do not yet own the software.

## Friday Morning, 16 August 2019

WORK  
SHOP

### • **MAKE GYVER** • *(part 1 of 2)* • •

**TEACHER** **Gertjan Biasino**  
**TIME** **10 am – 1 pm**

**LEVEL** Beginner. You must have a basic understanding of Isadora and Arduino.

**DESCRIPTION** Make Gyver is a workshop with a difference and done in honor of MacGyver (remember the TV character?), who was quiet, deeply principled, and refused to carry expensive tools on his missions. He had a flexible attitude towards whatever tools were in front of him.

MacGyver had no fear of trying something new, and neither should you! So, with NO practical knowledge of science, participants in this workshop will be able to make use of an Arduino and any mundane materials around them—or found on the internet—to create unorthodox solutions to any problem they face. In Make Gyver, we look for DIY-ways to create basic practical effects. Except for a basic understanding of Isadora, you don't need a lot of practical knowledge.

**REQUIREMENTS** Laptop and DMX Interface. Having Arduino installed is suggested but not required. If possible, bring a small screwdriver kit and some wire.

## Friday Morning, 16 August 2019

WORK  
SHOP

### • **EXTENDING MEDIA – ANALOG TO DIGITAL AND BACK: • A HANDS-ON WORKSHOP INTEGRATING PHYSICAL COMPUTING, • SENSORS, AND ISADORA FOR PERFORMANCE AND INSTALLATION**

*(part 2 of 2)*

TEACHER

**Ian Winters**

TIME

**10 am – 1 pm**

LEVEL

Intermediate. Solid knowledge of Isadora; comfortable working with your hands and a soldering iron. Elementary C++ or other programming knowledge helpful but not essential.

DESCRIPTION

A hands-on workshop exploring the basics of working with the world of physical computing and analog to digital sensors of many kinds.

You'll find out how to utilize sound, light, movement, bioelectric fields, heartbeats, etc. as an input to Isadora, and the reverse—Isadora as a control for digital to analog devices such as LED's, relays, speakers, vacuums, and film projectors you can sing to, or even a teapot that sings to you! More concretely, via soldering, we'll assemble a basic Arduino or Arduino-type board and a variety of sensors from parts. Then we'll write the necessary code to have it communicate with Isadora over serial and next, develop an interface patch in Isadora to receive the input and forward on via OSC. If we have extra time, we'll reverse the process and look at ways to have Isadora communicate back to the analog world through a wide variety of D/A mechanisms such as relays and LED drivers.

REQUIREMENTS Laptop

## Friday Morning, 16 August 2019



### • • • • **IZZYMAP INTERMEDIATE**

**TEACHER** **Graham Thorne**

**TIME** **10 am - 1 pm**

**LEVEL** Intermediate. You should know how to load videos into Isadora and show stages, add basic effects, and understand the basics of projection mapping using IzzyMap.

**DESCRIPTION** Learn how to projection map using the built-in IzzyMap feature in Isadora. We will explore Masking using the composite mapper type, the composite mapper, and grid mapping in addition to multiple projector setups and the publishing of parameters within the mapper.

**REQUIREMENTS** Laptop

**Friday Morning, 16 August 2019**



## **WHAT YOU DO WITH THE DATA**

**TEACHER** **Mark Coniglio**  
**TIME** **10 am - 1 pm**

**LEVEL** Intermediate

**DESCRIPTION** Get your data to meaningfully control video, sound, and light.

So, you've got your sensory systems hooked up, measuring movement or other actions of performers or the public. But what do you do with all those numbers? Mark will draw upon his lifelong practice of creating interactive performances to show you how to massage those numbers to manipulate media. The first part of the lecture will offer an inventory of ways to interpret the data, which will be followed by techniques that offer your performers truly subtle and sensitive inflection upon the media.

**REQUIREMENTS** Laptop and some video media that is ready to play.

## Friday Afternoon, 16 August 2019



### **BODY TRACKING**

*Workshop also offered Saturday, 10 am – 1 pm*

#### TEACHER

**Mark Coniglio**

#### TIME

**3 – 6 pm**

#### LEVEL

Intermediate

#### DESCRIPTION

A hands-on workshop that introduces you to specific tracking cameras and an introduction to the new Body Tracker actor.

Isadora 3 introduced the possibility to receive depth map images from a wide range of tracking cameras: Kinect 1, Kinect 2, Orbbec Astra, and Intel RealSense. The first part is about getting to know all four devices, explaining the pros and cons of each, and showing you how to use these new, depth map sources as the root of interactive control. This will be followed by an in-depth introduction to the new Body Tracker actor, which allows you to use normal cameras to place a 2D “skeleton” upon the silhouette of a moving body. In both cases, you will have time to set up your device, try out Mark’s examples, experience the results, and seek additional guidance about how to get the most from these exciting new tools. We will close by showing how to install open source tools that will let you impose a true 3D skeleton on the depth map input.

#### REQUIREMENTS

A laptop and whatever tracking camera (Kinect 1, Kinect 2, Orbbec Astra, or Intel RealSense) you wish to work with. If you wish to try the Body Tracker actor, you will also need an external camera or webcam, preferably one whose automatic brightness control can be disabled, or else one of the of the tracking cameras mentioned above. Your laptop’s internal camera will not provide satisfactory results for this workshop!

## Friday Afternoon, 16 August 2019

WORK  
SHOP

### • **MAKE GYVER** • *(part 2 of 2)* •

**TEACHER** **Gertjan Biasino**  
**TIME** **3 – 6 pm**

**LEVEL** Beginner. You must have a basic understanding of Isadora and Arduino.

**DESCRIPTION** Make Gyver is a workshop with a difference and done in honor of MacGyver (remember the TV character?), who was quiet, deeply principled, and refused to carry expensive tools on his missions. He had a flexible attitude towards whatever tools were in front of him.

MacGyver had no fear of trying something new, and neither should you! So, with NO practical knowledge of science, participants in this workshop will be able to make use of an Arduino and any mundane materials around them—or found on the internet—to create unorthodox solutions to any problem they face. In Make Gyver, we look for DIY-ways to create basic practical effects. Except for a basic understanding of Isadora, you don't need a lot of practical knowledge.

**REQUIREMENTS** Laptop and DMX Interface. Having Arduino installed is suggested but not required. If possible, bring a small screwdriver kit and some wire.

## Friday Afternoon, 16 August 2019



### • **ABC OF OSC AND MIDI**

**TEACHER** **Graham Thorne**  
**TIME** **3 – 6 pm**

**LEVEL** Beginner. Participants must have a basic understanding of how Isadora works.

**DESCRIPTION** Maybe you have access to a MIDI controller and have heard about TouchOSC but have yet to explore what they really do. Maybe you keep hearing some terms on the forum or social media and keep wondering what they are... If this sounds like you, then this is the workshop for you.

We will go through the basic setup and the use cases and common problems of two very popular protocols. MIDI and OSC expand the creative applications of Isadora in many ways and for new users, this becomes very exciting!

**REQUIREMENTS** Laptop

## Friday Afternoon, 16 August 2019

WORK  
SHOP

### • **TALKING TO LIGHTS; DMX, ARTNET, AND PIXEL MAPPING**

• *Workshop also offered Thursday, 10 am – 1 pm*

TEACHER **Ryan Webber**  
TIME **3 – 6 pm**

LEVEL Intermediate. Participants should have experience with User Actors and Value Scaling.

DESCRIPTION Learn how to amplify lighting in your projects for dramatic impact.

Isadora offers a number of ways to add lighting and create incredible effects. We will work with serial connections for passing and receiving DMX, Ethernet connections for working with Artnet, and Isadora's built-in pixel mapping features. You will learn to extract color values from regions of your videos in a number of ways and use this information to control lighting fixtures or addressable LEDs.

REQUIREMENTS Laptop along with the ArtNet plugins, plus any adapters you require to connect to Ethernet and USB type A.

## Friday Afternoon, 16 August 2019



### ISADORA QUICK & DIRTY

**MODERATOR** Michel Weber

**TIME** 3 – 4 pm

**LEVEL** All are welcome!

**DESCRIPTION** There is Isadora in theory and there is Isadora in practice. Michel will share a rundown of top tricks and shortcuts for the practical Isadora user. Have a tip to share? Bring it to Quick & Dirty!  
You have 5-10 min to show your favorite Isadora tricks.

**Friday Evening, 16 August 2019**



**PROFESSIONAL PRACTICE  
BRIDGING WORLDS:  
EXPERIMENTAL ARTISTS AND LARGE VENUE WORKFLOW WITH ISADORA**

**MODERATOR** Ian Winters  
**TIME** 7:30 – 8:30 pm

**LEVEL** Open to anyone but especially, artists, directors, and designers working in large venue environments.

**DESCRIPTION** This collaborative session is a peer-to-peer discussion on how to incorporate tools integral to a practice based in experimental work into the workflow of larger venues. What are the methods and practices for incorporating artist-friendly tools like Isadora and Max into a large venue workflow that prioritizes repeatability, a designer/operator model, and proprietary hardware/software tools like D3 and Watchout?

**REQUIREMENTS** Bring whatever you need to participate.

## Saturday Morning, 17 August 2019

WORK  
SHOP

### **BODY TRACKING**

*Workshop also offered Friday, 3 - 6 pm*

TEACHER

**Mark Coniglio**

TIME

**10 am - 1 pm**

LEVEL

Intermediate

DESCRIPTION

A hands-on workshop that introduces you to specific tracking cameras and an introduction to the new Body Tracker actor.

Isadora 3 introduced the possibility to receive depth map images from a wide range of tracking cameras: Kinect 1, Kinect 2, Orbbec Astra, and Intel RealSense. The first part is about getting to know all four devices, explaining the pros and cons of each, and showing you how to use these new, depth map sources as the root of interactive control. This will be followed by an in-depth introduction to the new Body Tracker actor, which allows you to use normal cameras to place a 2D “skeleton” upon the silhouette of a moving body. In both cases, you will have time to set up your device, try out Mark’s examples, experience the results, and seek additional guidance about how to get the most from these exciting new tools. We will close by showing how to install open source tools that will let you impose a true 3D skeleton on the depth map input.

REQUIREMENTS

A laptop and whatever tracking camera (Kinect 1, Kinect 2, Orbbec Astra, or Intel RealSense) you wish to work with. If you wish to try the Body Tracker actor, you will also need an external camera or webcam, preferably one whose automatic brightness control can be disabled, or else one of the of the tracking cameras mentioned above. Your laptop’s internal camera will not provide satisfactory results for this workshop!

## Saturday Morning, 17 August 2019



### • **IZZYMAP BASICS**

• *Workshop also offered Thursday, 3 – 6 pm*

#### TEACHER

**Graham Thorne**

#### TIME

**10 am – 1 pm**

#### LEVEL

Beginner. Participants should be able to load videos into Isadora and show stages.

#### DESCRIPTION

Learn how to projection map using the built-in IzzyMap feature in Isadora. Make video fit perfectly on to custom shapes and objects in the real world. This powerful tool is great for architectural, DJ booth, and digital set projection mapping.

#### REQUIREMENTS

Laptop

## Saturday Morning, 17 August 2019



### ISADORA IN REHEARSALS

**TEACHER** Clemens Kowalski and Oscar Loeser  
**TIME** 10 am – 1 pm

**LEVEL** Beginner to Intermediate. You know how to use Isadora to play a movie and project it and want to know the ways of utilizing it in theatrical work.

**DESCRIPTION** This workshop concentrates on getting the most from Isadora during rehearsals in a theater, with a particular focus on being as spontaneous as possible during the process. We will cover topics like preparing footage, what codecs to use, setting resolutions, organizing directories and file structures, taking advantage of User Actors, using snapshots, and taking maximum advantage of the control panel. We'll also offer tips and tricks on how to arrange the patch to keep the creative energy flowing.

**REQUIREMENTS** Laptop

**Saturday Morning, 17 August 2019**



**VERY REAL ENVIRONMENTS: WORKING WITH 360 VIDEO AND IMAGES**

**TEACHER** Ryan Webber  
**TIME** 10 am – 1 pm

**LEVEL** Intermediate, but all levels of users are welcome.

**DESCRIPTION** VR is everywhere these days, and Isadora offers features that allow you to create some Very Real environments. You can use 360° video and images in Isadora to create single or multi-projector projections that create life-like environments. Create environments that follow the movement on stage or react to any other user input you can generate.

**REQUIREMENTS** Laptop

## Saturday Morning, 17 August 2019

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### • **WHY DO WE DO WHAT WE DO? WORKING WITH TECHNOLOGY • AS A SOCIOPOLITICAL, TRANSCULTURAL AND SPIRITUAL FAMILY**

#### TEACHER

**Sammy Chien (Chimerik 似不像)**

#### TIME

**10 am – 1 pm**

#### LEVEL

All levels are welcome! Different levels will get different things out of it.

#### DESCRIPTION

This is an interdisciplinary and multidimensional journey with Isadora shared by Taiwanese-Canadian, queer, immigrant and interdisciplinary media/performance artist Sammy Chien. Sammy will share his last decades of work and research on integrating Isadora with movement practice, energy/spiritual work, sociopolitical activism and community engagement.

You will get to see how Isadora interacts in various interdisciplinary settings, formats and contexts which are less common in Eurocentric practices and perceptions of arts and technology—this can range from working with indigenous dance companies to incorporating Eastern spiritual practices, such as Qi Gong, as well as investigations about diaspora and decolonization. We'll touch upon projects from grassroots underground creations to commercial work, with a brand-new live demo of Sammy's current research project "W(e)aves," a solo performance that utilizes skeleton tracking (controls sound, video and lights) to tell stories about ancient Chinese pictograms in relation to Shamanism while also questioning sociopolitical power. After, the audience is invited to discuss spiritual values of media arts and the non-competitive, ethical and family-love values imbued in the Isadora community

**REQUIREMENTS** No specific requirement. We encourage you to bring your open mind and heart.

## Saturday Afternoon, 17 August 2019

EVENT • **CREATIVE SPACE AND FINAL PREPARATION FOR THE WERKSTATT SHOWCASE.**

TIME **3 – 7:30 pm**

## Saturday Evening, 17 August 2019

EVENT • **WERKSTATT SHOWCASE**

TIME **7:30 pm – Open-end**

DESCRIPTION Tonight is YOUR night! Unlike the previous two Werkstatts where our performances featured invited guests, our Saturday evening Showcase will feature sixteen performances—some by individuals, and hopefully many by teams—created by those in attendance at this year’s Werkstatt. This evening is a culmination of the four days of activities and interactions—an extended version of what we did at the Isadora Hackathon at the 2017 Werkstatt. As we did then, we’re going to encourage you to take what you’ve learned, team up with colleagues, integrate your existing know-how and materials, and whip up something to show—but this time over the entire four days of the Werkstatt. Then, starting at 8pm on Saturday night and continuing until the wee hours, you’ll will both present and witness a wonderful and raucous sharing of who we are and what we do. From slightly polished to just barely working, these performances will serve as a final celebration of the creativity and technical wizardry that YOU bring to the Isadora Werkstatt.

## Biographies

**CLEMENS KOWALSKI** is a stage designer. His working areas are spatial relations between human beings and nature. For many years now, his artistic preoccupations have been analog and digital projections.

**OSCAR LOESER** is a Berlin-based visual artist who develops visual concepts for dance pieces and installations in addition to projections for theater and open spaces. He graduated from the Potsdam film school as an editor and has worked for choreographers, musicians, and institutions as well as documentary directors (mostly experimental films). In 2013, he founded AVK4 with Clemens Kowalski, producing installations and dealing with projection mapping. Oscar's great love is to capture dance performances. More at: [www.avk4.net](http://www.avk4.net), [www.vimeo.com/oscarloeser](http://www.vimeo.com/oscarloeser)

**AVK4** is the cryptonym of Clemens Kowalski and Oscar Loeser. Together, they seek to investigate the moving image in the space between theater and installation. Their work is aligned with media philosophy and real, live encounters of image and space. Founded in 2013, AVK4 developed an installation, Kapsel, which adapts to any space in which it is shown. AVK4 also provide visuals for (dance) theater companies and mappings. Loopstation was developed in 2017.

**ENI BRANDNER** is a filmmaker and multimedia/video artist who lives and works in Vienna as a writer, director, animator, and visual effects consultant. Since her studies in multimedia art at the University of Applied Sciences in Salzburg and classical animated film at the Academy of Fine Arts in Zagreb, she has focused on experimental ways of creating narratives in the interdisciplinary realm between film, music, and performing arts. Her most recent works are a short film called "Pantopos" for the project "Happiness Machine"—a performance about the common good economy by the Klangforum Wien; a film called "Me-Log" as part of the experimental TV format "Pixel, Bytes & Film" for ORF III (Austrian national public service broadcaster) and Arte Creative (Franco-German free-to-air television network); and projection design for the theater piece "Kein Groschen Brecht!"—a feminist take on Bertolt Brecht's work.

**GERTJAN BIASINO** constantly looks for the synergy between different media. Gertjan studied audiovisual arts (experimental film) at Sing-Lukas Brussels, where he focused on combining film with theater, performance, and fine arts. Since leaving his studies, he's enjoyed confronting spectators with the limitations of human perception and observation at the same time, creating a kind of poetry between technology and performance. While producing his projects, he considers how the audience will access the world he creates in his installation-performances. In addition to his own work, Biasino collaborates with other artists in Belgium and abroad. He specializes in real-time video installations in combination with moving objects and practical effects. He always finds ways to tell the story with a combination of technical mastery and subtlety.

Many of you will know **GRAHAM THORNE** as skulpture from his website, Isadora forum, blog, and social media channels. Graham is a visual production lecturer and course leader at Backstage Academy in Wakefield, UK by day. He has worked on various projects around the world, including locales like Glastonbury, Helsinki, London, and many more. His work generally involves projection mapping, custom user interaction, or motion tracking. Graham has been using Isadora for over a decade, also working for TroikaTronix for over 10 years as a Pro User, Beta tester, and Forum moderator. Graham is a qualified lecturer and likes to make his sessions professional yet playful with a nice pace for learning.

## Biographies

**IAN WINTERS** is a video & media artist working at the intersections of physical performance, installations/architectural form, and time-based media. His work often looks at the interfaces between the analog and digital worlds through physical performance, technology, and explorations of temporality and data. He also collaborates with composers, directors, and choreographers to create staged and site-specific media environments through performance, visual, and acoustic media as well as more traditional projection/visual design for opera, dance, and contemporary music for many noted venues and companies worldwide. Recent projects include commissions from EMPAC and the Hewlett Foundation's Creative Work Fund. He is currently a visiting research fellow at the University of Sussex.

More at: [ianwinters.com](http://ianwinters.com)

**JOSCHA ECKERT** works as a freelance lighting and video technician as well as a technical manager for artists and productions from the independent theater and performance scene. After graduating in 2013 from his studies in event and theater technology at Städtische Bühnen Osnabrück, he worked as a technical manager and head of the lighting department at Theater Ramp in Stuttgart (with Marie Bues and director Jan-Christoph Gockel) and Backsteinhaus Produktion. He's been busy using all his skills collaborating with artists such as Monstertruck, Vinge/Müller, and Showcase Beat Le Mot on national and international stages.

**L WILSON-SPIRO** is a media artist, technical design consultant, multimedia show control programmer, freelance theater technician, and lighting, interactive technology, and projection designer. They are particularly passionate about creating original, text-based works that incorporate interactive technology, often operating projections live on stage while performing. L is a member of the TroikaTronix Technical Support Team and assists Isadora users via the TroikaTronix ticket system and the online forum.

Composer and media artist **MARK CONIGLIO** is widely recognized as a pioneering force in the field of interactive performance. With Dawn Stoppiello, he cofounded the media intensive dance group Troika Ranch in 1994. As a result of this artistic practice, he created Isadora—a software tool that provides deep interactive control over digital media. Isadora has become the tool of choice for thousands worldwide, including such notables as Francis Ford Coppola, The Wooster Group, and the Royal Shakespeare Company. Coniglio has received a "Bessie" award, a prize from Prix Ars Electronica, and the World Technology Award, which recognized his long-term legacy in art and technology.

Since the end of the 1990's, **MICHEL WEBER** has dealt with still and moving pictures. He started out as a light operator and then began working as a video technician in 2004. Since 2008, he has led the video department of the Theater der Künste, which is part of the Zurich University of the Arts (ZHdK), and taught courses in digital video technology. He collaborated with the research team IPF, Institute for Performing Arts and Film (ZHdK), in the research project Actor and Avatar. He is an Isadora beta tester, forum moderator, and part of the TroikaTronix Team. Michel often works with analog and digital signals, computer networks, and communication protocols like RS232, DMX, MIDI, and OSC.

**MONTGOMERY C MARTIN** is a Toronto-based digital media artist specializing in projection design, interactive performance, and live-streaming. He is a technical consultant and writer for TroikaTronix. Recent projection design works include: "Moro and Jasp in Stupefaction" (Kabin and U.N.I.T Productions 2017);

## Biographies

“Riverboat Coffee House: The Yorkville Scene” (Soulpepper 2017); “A Moveable Feast: Paris in the 1920s” (Soulpepper 2018); “Out the Window” (Luminato 2018); “Rose” (Soulpepper 2019); “The Virgin Trials” (Soulpepper 2019); and “Hook Up” (Tapestry Opera & Theatre Passe Muraille 2019). Montgomery is a PhD candidate at the Centre for Drama, Theatre and Performance Studies at the University of Toronto. He also co-hosts Dungeon Dudes, a YouTube-based web series about tabletop roleplaying games ([www.dungeondudes.com](http://www.dungeondudes.com)).

Inspired by rebels, visionary pedagogues, and magicians, **RUTH SERGEL** creates bold and compassionate works that bridge art and technology, memory, and wonder to incite individual and social transformation. Ruth’s work has been exhibited at the Museum of Modern Art, Boston Museum of Fine Art, Corcoran Gallery of Art, National Museum of Women in the Arts, the New York Historical Society, and 3LD Art and Technology Center. In 2011, Ruth was honored to be included in the Community Leaders Briefing Series at the Obama White House. Her book, “See You in the Streets!” won a 2017 American Book Award. More at: [www.streetpictures.org](http://www.streetpictures.org)

**RYAN WEBBER** has developed multimedia applications since the mid 90’s. His first experiments in generative image creation and video mixing were developed in Director’s Lingo script. This work led to developing online games in shockwave and Flash, and then on to the development of front and back-end websites for major broadcasters. His love of real-time video art continued through his regular VJ engagements at a number of Toronto electronic music events, which inspired the development of a fashion label that he continues to design and market online. These experiences come together in his role as a member of the TroikaTronix Team, where he has worked extensively in Isadora, both as a platform for live video performance and as a framework for creating rich interactive and data-driven installations.

**SAMMY CHIEN (CHIMERIK似不像)** is a first-generation Taiwanese-Canadian immigrant and queer artist-of-color. He is an interdisciplinary artist, director, performer, researcher and mentor who works with film, sound art, new media, performance, movement and spiritual practice. Her work has been exhibited across Canada, Western Europe, and Asia including Centre Pompidou (Paris) and the National Centre for the Performing Arts (Beijing). They have worked with pioneers of digital performance: Troika Ranch and Wong Kar Wai’s Cinematographer Christopher Doyle. Currently, he is active in research/creation/mentorship projects engaging various marginalized groups including activists, poverty survivors, the mental health community, spiritual teachers, QTBI-POC and young artists. Sammy is the official mentor of Isadora (TroikaTronix) and Co-Founder/Artistic Director of Chimerik似不像 collective.

**SIMONE GRÜNWARD** likes to see how things change. She is a professional transformation observer. She used to design clothes but now she designs your mood—in the shape of coffee!

As a cultural manager, **XENIA LEYDEL’S** work with artists is informed by a dramaturgical process. Bridging practical concerns, creative impulses, and business development, Xenia provides holistic artist support and career management. Born in Dresden, she is company manager for TroikaTronix and producer of the Isadora Werkstatt. Xenia trained in contemporary dance and was a dancer and choreographer in Berlin before becoming the new media program coordinator for the Stuttgarter Filmwinter and employed by the Forum Neues Musiktheater of the Staatsoper Stuttgart. She has worked with many artists including: Susanne Linke, Antonia Baehr, SheShePop, Josephine Evrard, and the Internationale TanzFilmPlattform Pool.

## Locations & Tickets

UFERSTUDIOS Uferstr. 23 or Badstr. 41a  
13357 Berlin

MAP LINK → <https://goo.gl/maps/hMEFGkmr8by>

PUBLIC TRANSPORT U8 Pankstraße  
U9 Nauener Platz / Osloerstr  
M27 Pankstr  
S-Bahn Gesundbrunnen / Humboldthain

### WERKSTATT PRICES\*

Includes entrance to all workshops, lectures, events, and the Creative Space as long as seats are available.  
Places are limited so sign up early for the best selection!

4-DAY INDIVIDUAL PASS	400€
4-DAY INSTITUTIONAL PASS	550€ **
DAY PASS INDIVIDUAL	119€***
DAY PASS INSTITUTIONAL	150€**

\* The workshop “Composition and the Hybrid Instrument/Interface” has a modest materials fee of no more than €50.

\*\* The Institutional price is for individuals whose attendance at the Werkstatt is supported by universities, corporations, etc.

\*\*\* Day Passes are available for each day.

**Tickets go on sale 6 June 2019 at 10 am Berlin time (CEST). Please check** → <https://pretix.eu/troikatronix/werkstatt-2019>

TROIKATRONIX : ISADORA Mark Coniglio : Neue Schönhauser Straße 12 : 10178 Berlin : Germany : [troikatronix.com](http://troikatronix.com)

# FAQ

## :: What is a workshop, lecture or event?

**WORKSHOP** Hands-on course. Generally limited to approximately 15 users.

**LECTURE** Presentation for up to 50 users.

**EVENT** Keynote and community events.

## :: Free Isadora Workshop License

**Please come to class with Isadora already installed.** Isadora is available for download at → <http://troikatronix.com/get-it>. If you do not already have an Isadora license, we will provide you a temporary license for the duration of the Werkstatt. Other workshop specific requirements are listed in the program or will be emailed to you by your instructors.

## :: Power

Workshop classrooms will provide power to all students.

Lectures and Creative Space will have charging stations.

## :: Language

English

## :: Course Levels

Please check each workshop for the minimum level of proficiency with Isadora.

**BEGINNER** New to Isadora

**INTERMEDIATE** Comfortable with basic Isadora interface

**ADVANCED** Experienced Izzy User

# FAQ

## :: Creative Space

Hosted by the TroikaTronix Team

Wednesday – Saturday, 10:00 am – 7:30 pm

Studio 13 (the foyer space outside the Studio 14 theater)

## :: Cafe

Our popular cafe will make a happy return to the Uferstudios. Open throughout the day, you'll have quick access to tasty and affordable meals, coffee, and libations.

## :: Social Media

#izzywerkstatt

FACEBOOK → <https://www.facebook.com/troikatronix>

INSTAGRAM → [https://www.instagram.com/troikatronix\\_isadora](https://www.instagram.com/troikatronix_isadora)

**Questions about the Werkstatt? Email:** → [werkstatt@troikatronix.com](mailto:werkstatt@troikatronix.com)

**Looking forward to seeing you in August!**

TROIKATRONIX : ISADORA

Mark Coniglio : Neue Schönhauser Straße 12 : 10178 Berlin : Germany : [troikatronix.com](http://troikatronix.com)