

LIVE CINEMA CODING

TIDAL CYCLES > PROCESSING > UNREAL ENGINE

ICLC 2023

CNDSO + IVAN ABREU

TOPICS

1. Live Cinema Coding
2. Demos
3. Resources (GITHUB)
4. Sound Visualization Classification
5. Our Workflow
6. Quick Overview To Tidal Pattern
7. Trigger Or Flow
8. Customize The Sound Visualization Solution
9. Collective Sound Visualization (practice)

RESOURCES (GITHUB)

<https://github.com/ivan-abreu/live-cinema-coding-iclc-2023>

SOUND VISUALIZATION CLASSIFICATION

1. Audio Reaction
2. Audio Reaction Disaggregated By Analysis
3. Audio Reaction + Music Composition Visualization
4. Music Composition Visualization

* Pre-process or Post-process

OUR WORKFLOW

1. Narrative Workflow
2. Technical Workflow

NARRATIVE WORKFLOW

1. Tidal Composition
2. Analysis Of Intentions (Listening)
3. Visual Narrative Strategy
4. Testing And Validation Cycles

TECHNICAL WORKFLOW

1. Creating Custom Functions In Tidal
2. Add Modifications To The Processing Server (If Necessary)
3. Connect Visualization In Unreal To Osc Server

TRIGGER OR FLOW

Asap or once

vs

d1 .. d2 .. d3 ..

PATTERN OR FILTER

\$

vs

#

THE "NULL" SAMPLE

d1 \$ s "null"

CUSTOMIZE THE SOUND VISUALIZATION

What you should do in:

- **Tidal**
- **Processing**
- **Unreal Engine**

QUICK OVERVIEW TO TIDAL PATTERN

SEQUENTIALITY **d1 \$ sound "A B"**

TRANSVERSALITY **d1 \$ sound "[A, B]"**

NESTING **d1 \$ sound "A [B [C D]]"**

PROCEDURAL FILM LANGUAGE

- Cameras: position, lens, movement
- Lighting
- Post-process
- Geometry: translate, rotate, scale
- Textures: narrative parameters

PROCEDURAL IMMERSIVE SURROUND WITH META-SOUND WITHIN UNREAL ENGINE

- Physics
- Simulation
- Virtual Sound Sculpture