

Writing interaction with i-score

Jean-Michaël Celerier

LaBRI

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The problem

- ▶ A lot of tools for entirely fixed temporal content
→ traditional song-writing.
- ▶ A lot of tools for fully interactive content
→ artistic installations.
- ▶ What goes in between ?

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Visual temporal programming language

The interface displays a visual temporal programming language environment. The main workspace shows a sequence of events and transitions over time, with a timeline from 0:00.0 to 0:30.0. The sequence includes a Boolean condition on remote parameters, a full dots cue, and various elements that can rejoin themselves. A loop pattern is also shown, containing Automation.1.

Annotations in the workspace:

- This will trigger when a condition on remote parameters become true
- Various elements can rejoin themselves
- The full dots will send a cue (a list of OSC messages)
- Boolean condition on remote parameters
- A curve
- Other curves
- In sequence
- A loop
- Loop pattern

The left sidebar shows a list of parameters and their values:

| Address | Value | Get |
|-------------------|-------|-----|
| OScDevice | | |
| u1 | | |
| focus | 1 | |
| master | | |
| still | 0 | |
| flash | 0.2 | |
| imColor | 0 | |
| soundOutLevel | 0 | |
| trackLevel | | |
| soundLevelCapture | 1 | |
| imColorB | 0 | |
| imColorG | 0 | |
| imColorR | 0 | |
| addColorB | 0 | |
| addColorG | 0 | |
| addColorR | 0 | |
| backgroundColorB | 1 | |
| backgroundColorG | 0.5 | |
| backgroundColorR | 0 | |
| alpha | 1 | |
| scale | 0.4 | |
| speed | 0.6 | |
| TimeRecPosition | 0 | |
| layerSetGroupB | 0 | |
| layerSetGroupA | 0 | |
| crossfader | | |
| layer | | |
| mediaSet | 0 | |
| media | 999 | |
| auto | | |
| transformer | false | |
| on | | |
| type | | |
| particle | | |
| patch | | |
| thickness | 1 | |
| subdivT | 30 | |
| subdivX | 30 | |
| soundInput... | false | |
| dimapinAlp... | false | |
| colorOn | true | |
| soundInput... | 0 | |
| resetLevel | 0 | |
| dimappingL... | 0 | |
| fillMode | 0 | |
| shapeType | 0 | |
| matrix | | |
| RipX/Y/Z | 0 | |
| RipX/Y/Z | 0 | |
| RipX/Y/Z | 0 | |
| extrusionLe... | 0 | |
| devDevice | 0 | |
| devDevice | 0 | |

The right sidebar shows the Inspector panel with the following settings:

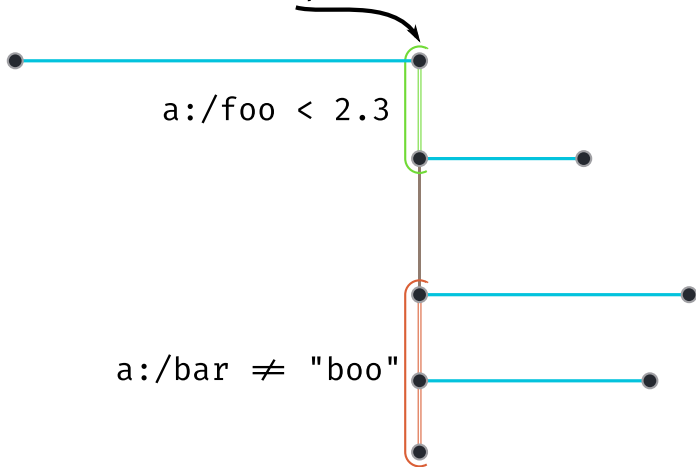
- Constraint: Other curves
- Label: (empty)
- Full view: Start State, End State
- Durations: Default Duration: 0.00.06.809, Loop content: (unchecked)
- Processes: View, Add Process, Processes: Automation.1 (checked)
- Automation.1: OSCdevice/master/flash, Min: 0.00, Max: 1.00, Display in new Slot
- Start: OSCdevice/master/flash 0, End: OSCdevice/master/flash 0.2, Duration: 0.00.06.809
- Automation.2, Automation.3, Automation.4, Automation.5 (all unchecked)

Working with distributed software

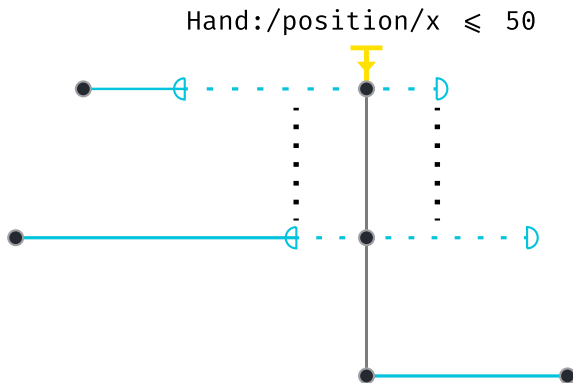


Conditions

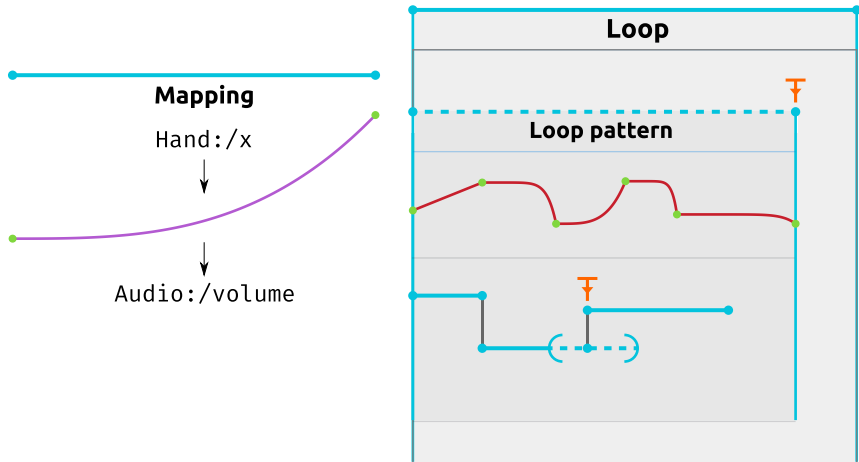
Evaluated at this point in time



Interactive triggering



Mapping, looping, and computations



Demonstration

Other applications

- ▶ Artistic and museum installations.
- ▶ Robot choreographies.
- ▶ Interactive music.

Ongoing research

- ▶ Spatial data creation and management.
- ▶ Audio integration.
- ▶ Handling specific interaction patterns (gestures, etc).
- ▶ Constraint solving to check unsound scores.

Thank you for your attention.
ご清聴ありがとうございました。