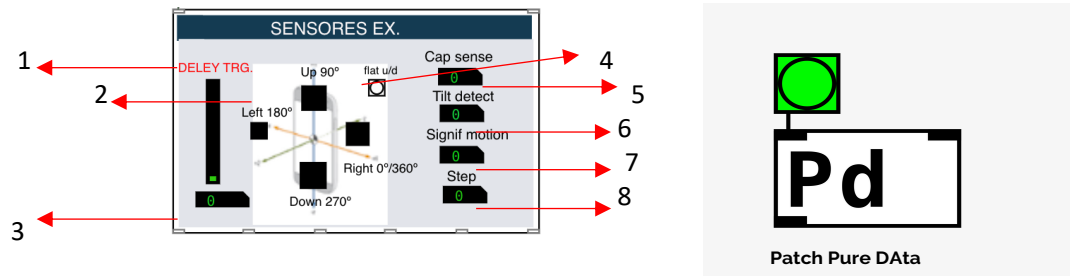**Patch Pure DAta**

EX1
MODULE

Diseño y desarrollo de sistemas MMHCI híbridos con bioseñales y un DMI de smartphones, para obras bio-interactivas mixtas y performáticas

Pure Data Patches for the PhD Thesis: Juan Pablo posada Alvarez

1. **Delay Trg**: This slider allows you to adjust the recapture time value of the detection of each position event of the Smartphone. When the time is very low, the algorithm can detect two events if there are small variations near the fixed detection position. The values for adjusting this parameter are between 500 ms and a maximum of 4000 ms.

2. **Orientation Event Display:** In this section of the module, you can observe each time the specific position of the Smartphone is detected. The 4 visual "bangs" arranged in the shape of a cross represent positions 1-2 and 3-4.

3. **Event Recapture Time:** Delay trg slider setting values.

4. **POS 5-6 Event Display:** This indicator can be observed whenever position 5 and 6 of the Smartphone orientation is detected.

5. **Cap Sense:** CapSense Sensor Value Viewer (Motorola)

6. **Tilt detect:** Display of values of the abrupt inclination sensor.

7. **Signif motion:** Significant motion sensor value display.

8. **Step:** Value display of the step detector sensor.

The module is connected as follows:

- **Left inlet:** Input for OSC module.

- **Right inlet:** Input for specific settings of the recapture time of the orientation detection sensor.

- **Outlets 1:** Output a Device Orientation Detection Bang at Position Number 3

- **Outlet 2:** Output a device orientation detection bang in position number 2

- **Outlets 3:** Output a device orientation detection bang at position number 5 and 6.

- **Outlet 4:** Output a device orientation detection bang in position number 1.

- **Outlet 5:** Output a device orientation detection bang at position number 2.

Outlet 6: Packaged output of the values of the 4 sensors of the module in the following order: 1→ "*cap sense*", 2→ "*titl detector*", 3→ "*Siginificant motion*" and 4→ "step detector"