### Interactive Programing Ecosystem

An input event trigger an output event

#### Input Events

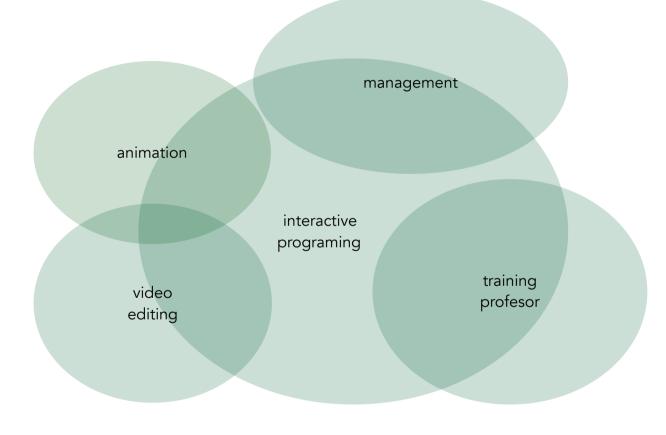
Change in humidity, temperature, light, sound, ... Press a button, slider, joystick, eye tracker, ... Timeout Database update

### **Output Events**

Change video settings: speed, colors, ... Convert into mechanics (open a door, ...) Send info to the internet Send telegram messages

**Software**: Resolume, Isadora, Touchdesigner, Processing, AFRAME, C#, Java, Javascript, Python [<u>Supercollider</u>, <u>vvvv</u>, <u>Ableton Live</u>, <u>OpenFrameworks</u>]\*

Hardware: Camera, Microphone, Sensors, Arduino, Raspberry, esp8266, Oculus



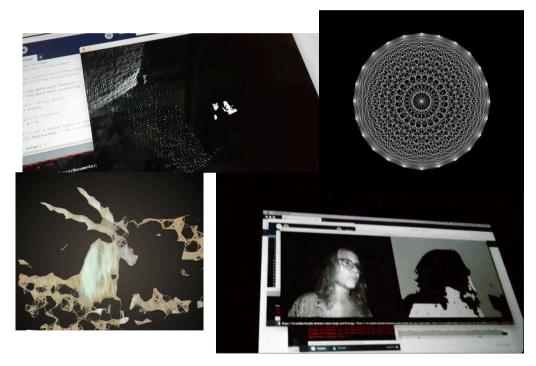
## Projects



### Touchdesigner:

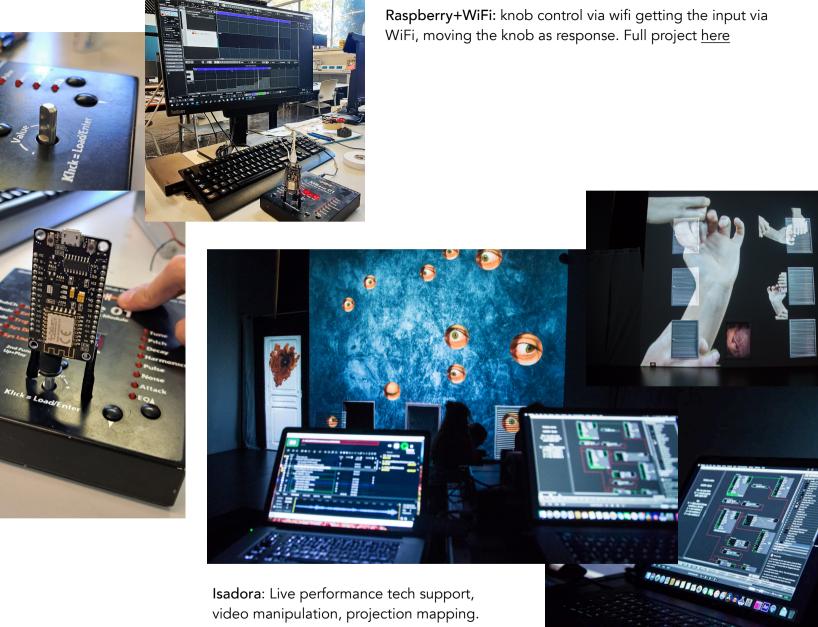
Audio-reactive animation created in real time. Takes input from the microphone to update the animation output on a projected screen.

Real-time video editing (separating foreground and background, adding particles)



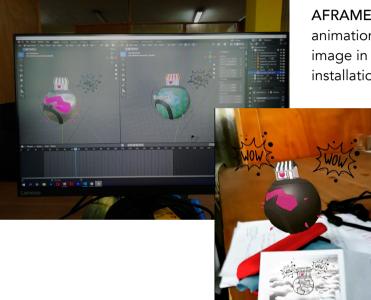
**Processing**: Creation and manipulation of images and animations, 3D images from 2D, real-time video processing via Kinect, also IR (infrared video)





video manipulation, projection mapping. Watch the video <u>here</u>

# AR/ VR



AFRAME: Augmented reality animation by scanning an image in paper via web (no installation needed) Virtual reality online game, working for oculus and mobiles. Red balls add 1 point, blue diamonds reset the score.

