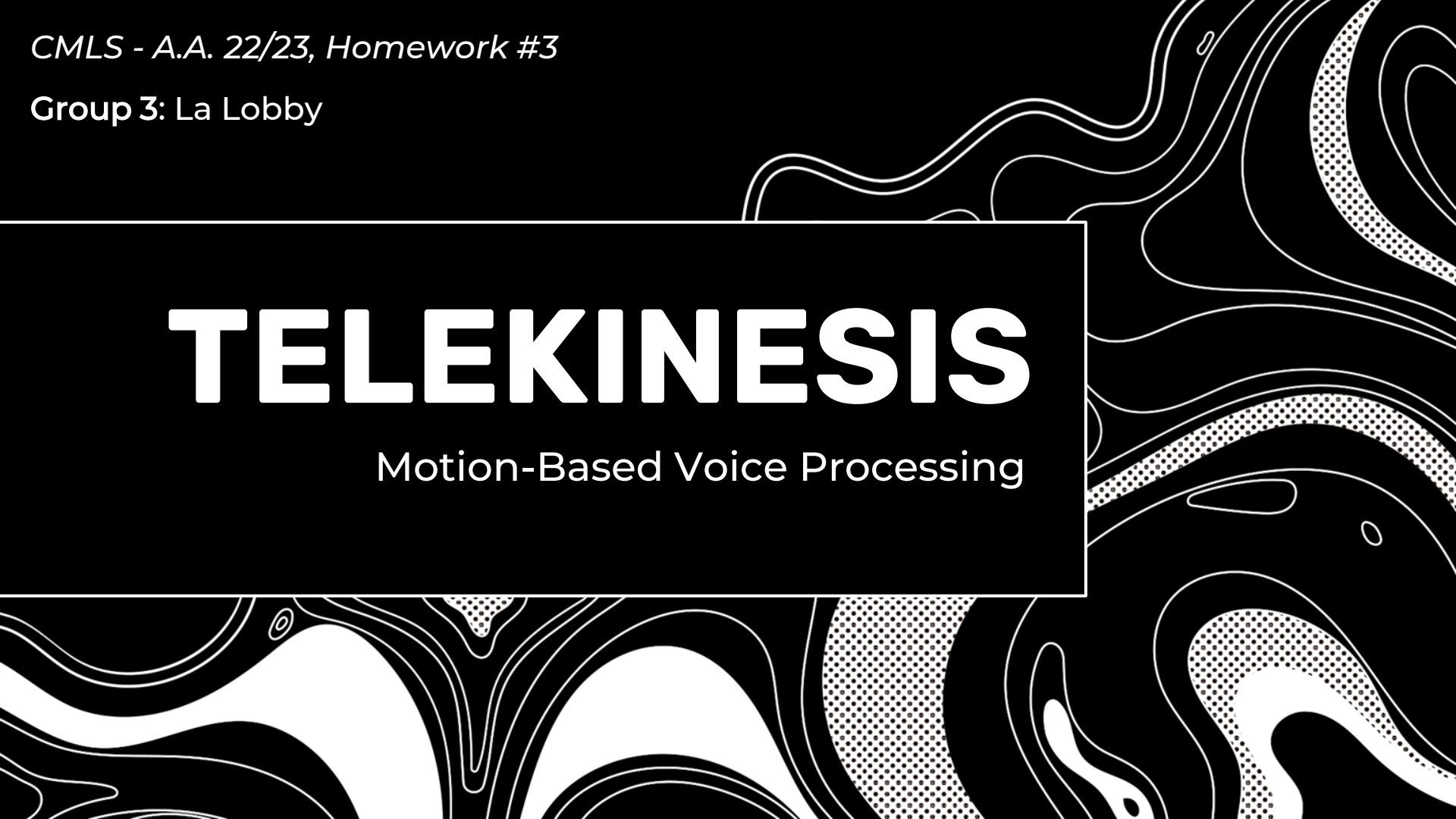


CMLS - A.A. 22/23, Homework #3

Group 3: La Lobby

# TELEKINESIS

Motion-Based Voice Processing



# FEATURES

## **EFFECT SELECTION**

Select one effect for each hand

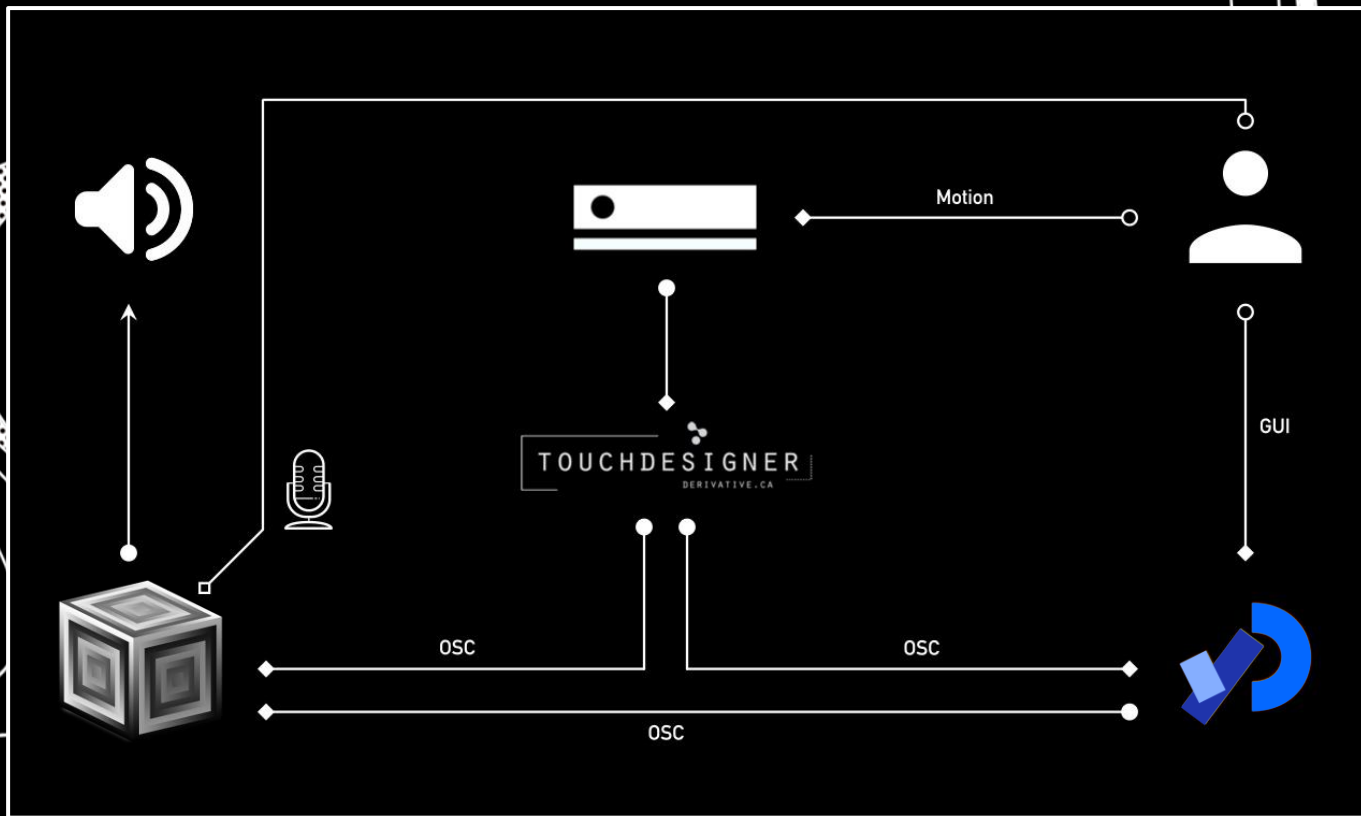
## **EFFECT MODULATION**

The parameters of the effect controlled by hands movement

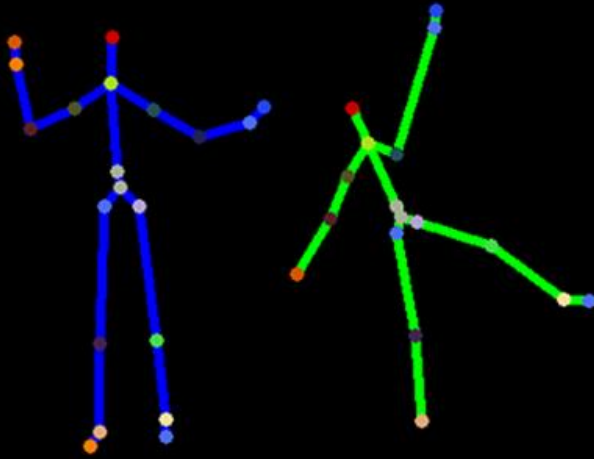
## **LOOP CONTROL**

Record, play and overdub a loop

# ARCHITECTURE

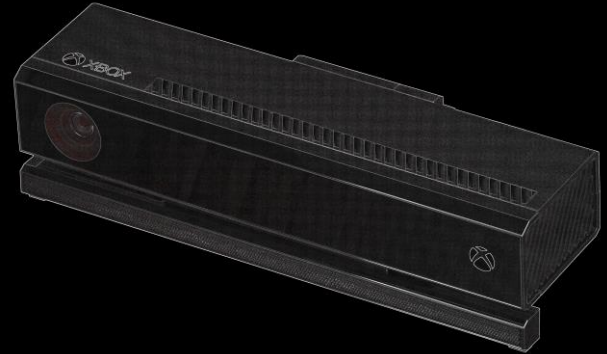


# MICROSOFT KINECT

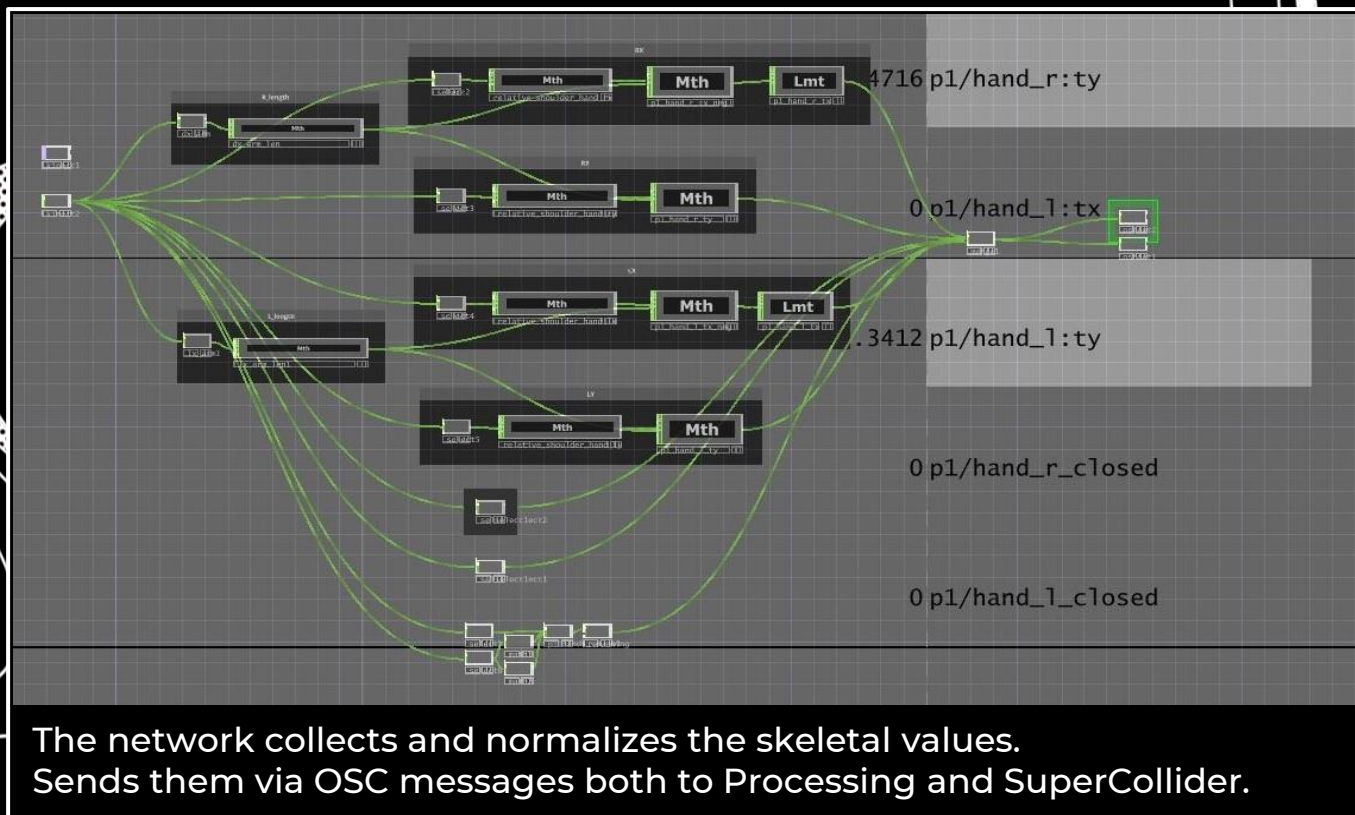


- Real-time Gesture Recognition
- Body Skeletal Detection

- Depth Map
- Color Map



# TOUCHDESIGNER



# SUPERCOLLIDER

Effects are in parallel, allowing the performer to control them independently.

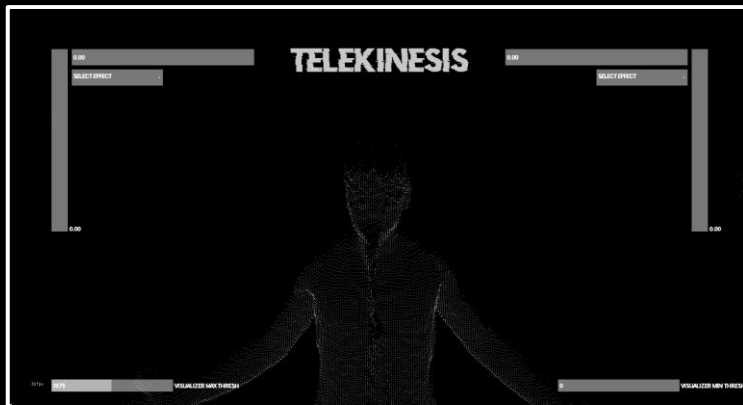
The Loop processing block is in series with the effects block: the effects will be recorded and looped too.

Incoming OSC messages control the different parameters of the effects.

The input device must be specified when booting the server.

# PROCESSING

Effect selection boxes



Real-time feedback for loop and playback via specific pop-ups.

PointCloud representation and camera depth thresholds.

Sliders visualize hands position values.

# CONCLUSIONS

The system could be perfected or modified to match the needs of the performer, adding other effects or implementing new features using the SuperCollider code.

The architecture, nonetheless, represents a robust and reliable skeleton to sustain the various needs of the artist.

TouchDesigner could be used to improve the complexity and interactivity of the visual aspects of the performance.







# Thank You for your Attention.

***La Lobby***

*Nicolò Chillè, Enrico Dalla Mora, Rocco Scarano, Federico Caroppo*