

Dependencies:

1. miraweb
2. karma~ external object in folder has to be placed under Packages folder or installed from Package manager
3. galaxy android tab
4. goldberg.mp3 and brushes.aif

Video: https://drive.google.com/open?id=1ecdO5hv9jauDLUYtzgAHTL5Uxn_XdVrH

This is a multitouch interface for varispeed playback. The interface is programmed with mira using an Android tab on a web browser and records multiple touch gestures

1. touch and slides on X,Y plane
2. 4-directional swipes
3. multitouch with 2 fingers
4. pinch
5. double tap

The above gestures are used to control a looper that has Record, Play, Stop, Overdub on 2 audio samples stored in their respective buffers.

The buffers are visualised as colorful waveforms in the Max app as they are played out.

However, the interesting interactive aspect is the ability to control the position and window size of the moving looping.

Swipe directions enable the user to change or vary the speed of playback (0.5,1,1.5,-1) with -1 being the reversal of sound.

Pinch gestures calculate distance between 2 fingers to change the cutoff frequency of a filter

The musical usage for an instrument like this touch beatpad would be in professional DJing for fine grained sample control. However, the limitations of this device are obvious when gestures like rotation and swipe leave a finger being continuously detected at the edge of the screen. In such cases, the fix for the Android tablet has been to refresh the webpage and leads to undesirable behavior musically. However, the potential for multi-touch devices to be used in mainstream musical products is next to physical MIDI controllers with the range of newer streams of data like accelerometers, gyroscopes etc. in iPads.