**<u>Readme</u>**
Virtual Conducting Experience - One half of Robaton

The Virtual Conducting Experience was developed by Alan Tishk, Music Technology Innovation, Class of 2014, and is one half of the Robaton Project.

I have included two Ableton Live sets - one set contains the Curiosibot Concerto (by Xueran Chen, M.M., SFTV, 2014) and an untitled piece by Ben Cantil (Berklee Valencia faculty), and the other set is blank.

In order to use the Virtual Conducting Experience, you will need Ableton Live, Max, Max for Live, and a Kinect sensor, specifically Model 1414 (with a power adapter), and you will need to install Synapse for Kinect (installer is included in this archive).  As of the time of completion of this project, no other Kinect models will work with Synapse, although that may change in the future.

Synapse is software that interprets data from the Kinect sensor and allows you to use it with your computer.

Information about Synapse is available here:
http://synapsekinect.tumblr.com/post/6307790318/synapse-for-kinect

The website for Synapse says that it requires Snow Leopard, Lion, or Mountain Lion to run, although I have been able to get it working on Mavericks with no problems.

Before the first time you use the Virtual Conducting Experience:

1) Install Synapse
2) Install Synapse.jit object
3) Move the zlsumandaverageof12.maxpat file to: Macintosh HD>Applications>Max
     6.1>patches>extras
3) Open Ableton Live set with Robaton patch inside
4) Click the button to edit the Robaton Max for Live patch (this one): 
5) Switch from Presentation Mode to Patching Mode
6) Instantiate the jit.synapse object as outlined in the comments
inside the patcher.  Failure to do so will result in Live and Max for Live crashing when you turn on the jit.synapse object with a toggle.  (Known problem with Synapse itself.)
7) Save Max for Live patcher, quit Max.
8) Quit Ableton Live. Virtual Conducting Experience is now ready for use!

To use the Virtual Conducting Experience:

1) Plug the Kinect into a power outlet.
2) Plug the USB end of the Kinect into your Mac.

3) Run Synapse.  Sometimes it takes a few tries to get it running - if it doesn't run the first time (or even the tenth), keep trying.  If you still can't get it to run, unplug the Kinect from the USB port, restart your computer, and try again.
4) Open one of the two Ableton Live sets included with this archive.
5) As long as Synapse is running, the Virtual Conducting Experience will be receiving information from it.  Click the toggle switch to turn on the synapse.jit object - you should now see a black-and-white video feed from the Kinect in the Virtual Conducting Experience patcher.
6) Switch to Synapse, leaving Ableton running in the background.
7) Step a few feet away from the Kinect and assume this pose:



7) After a moment, you should see a red skeleton bound to yourself.  Synapse is now tracking you.



8) Switch back to Ableton.  Toggle playback.  The Virtual Conducting Experience will track gestures you make with your right hand and use them to control timing of the playback, and dynamics of the virtual instruments.


The Virtual Conducting Experience was designed using stock samples available as part of the Berklee software bundle, with the exception of CineHarp pluck samples. However, as the Virtual Conducting Experience affects MIDI data in real time, *any* sample libraries or software instruments can be used.