Midi expression controller device

This is a project with the aim to give motion expression to instruments, samples, or any other system or program able to read midi data. In the examples given in the videos, I used the device as an expression tool for Orchestral libraries, usually a composer that uses this kind of libraries would use the mod wheel in a keyboard midi controller or maybe a slider to control the expression parameter, common in Orchestral libraries. This device could be an alternative as it can be controlled as well with other movements like the head or the legs or just to give more body expression control.

The USB midi device is possible with an Arduino Leonardo or Arduino mini among others, but it is not possible with the Arduino UNO board or equivalents. The procedure to get this working was:

- Connect the Gyroscope to the Arduino Leonardo
- Get the data from the Gyroscope in the Arduino IDE
- Then use this data with the USB midi library to make the board respond with midi messages.
- Now you have a device that can work with any software that read midi messages, the use can be varied at this stage depending on the use you want to give to it.

References:

Title: “USB_MIDI_Controller_Single”

* Author: “Interactive Systems Module, Maynooth University”
* Date: Unknown
* Availability: https://moodle.maynoothuniversity.ie/mod/folder/view.php?id=491986

Git hub repository

* Author: “Elosine”
* Date: 19/05/2016
* Availability: https://github.com/elosine/MPU6050_accel