

## **Report**

### **SESSION 4 ( 16/01/22 )**

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#### **Vahan Komaryan**

During this session I started by looking for a solution to a problem. With my program the motors vibrate a lot and tend to go out of alignment when the speed is too high. So I went back to my code a bit but I still haven't found the solution to the problem and I will continue my research on my own.

We then did our little presentation.

During the rest of the session I got some IR remote sensors to be able to do the stepper motor calibration code in the future. I finished by starting the modeling of the structure that will bring all the elements together and that will be 3D printed but I am only at the beginning. This structure will be fixed in a metal box.

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#### **Benjamin Choiselat**

During this session, I have continued to improve the capture of the sounds. I have actually switched to a higher frequency band for my running average, which seems to be more précise for a certain type of music, but it still doesn't quite work on other types.

For the presentation and for the final project, we bought an adaptor so that we can hear the music while the module has it in input. It also helps to find delays and the consistency of the calculations.

I then started to write a code to do the running average on two different frequency bands, to then compare the two results to find what kind of frequency the "kick" has.