

Final Year Project Presentation

The Big Theremin Theory

Summary

1. Context
2. The idea
3. Pure Data
4. The workshop
5. How does it work ?
6. Issues
7. Demonstration
8. Conclusion



Context



- Collaboration with the École Supérieure d'Art d'Aix en Provence
- Carried out with François Parra

The idea came from...

- Fruitful exchanges with different ways of thinking
- A sound generator video project
- The theremin video

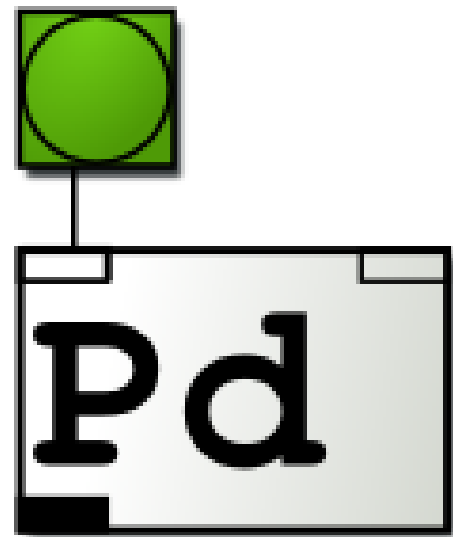
The video that changed everything



The idea

- Use android phone sensors to control the parameters of the sound:
 - Electromagnetic field (like the theremin)
 - GSM
 - Wifi
 - Accelerometer

The green side of the moon



Pure Data

- open source
- visual programming language
- optimized to generate music
- very flexible
- portable to Android

The workshop at Vasarely Foundation



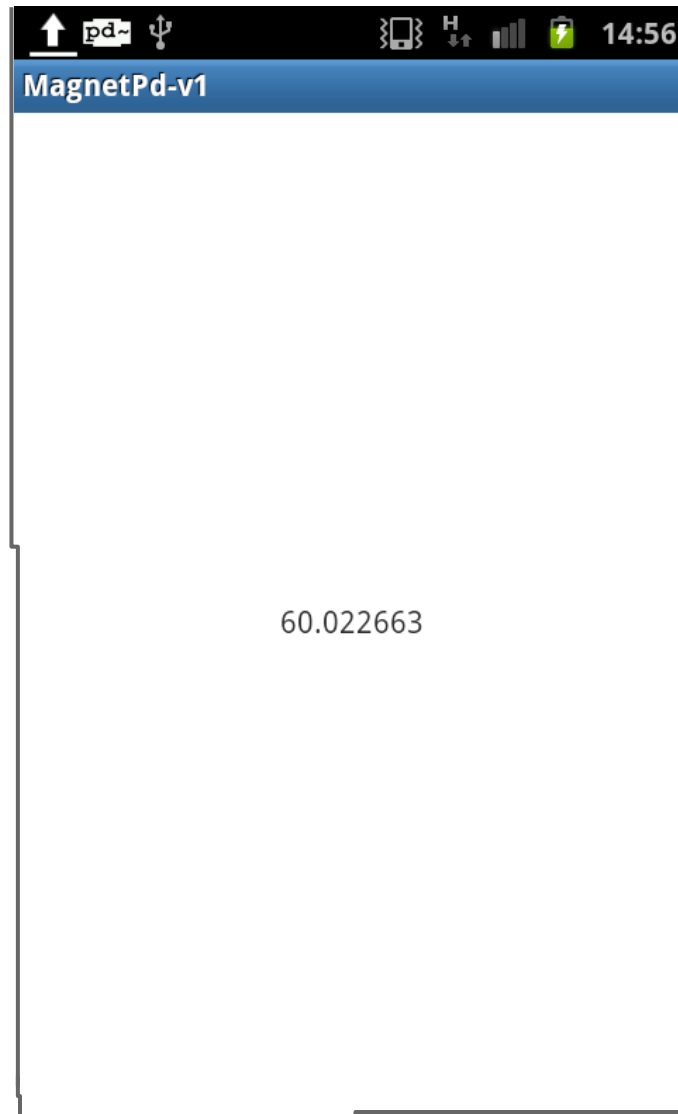
The workshop...

- Intensive Pure Data learning
- Reflection about where to lead the project
- Extremely productive for the ideas
- Numerous discussions and points of view



We made other people try and like it !

...led to a first version



How does it work ?

Sensors

Android

Pure Data

Music

GSM



tempo

Wifi



filters and effects



EM



pitch
rhythm

Sound synthesis

Issues

new programming language: Pure Data

Github

Interference and saturation in sound

GUI

Let's try it!



Conclusion

- Successful experiment
- Learned a lot of new things
- mind-opening project
- mix of art and techniques