

OpenVibe

Software for BCI and Virtual Reality

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Software for Brain Computer Interfaces and Real Time Neurosciences

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Dec 2018: OpenViBE v2.2.0 released

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OpenViBE Promotional Video

Key Features

HARDWARE SUPPORT

MULTIPLATFORM

OFFLINE ANALYSIS TOOL

**PYTHON, MATLAB & LUA
COMPATIBILITY**

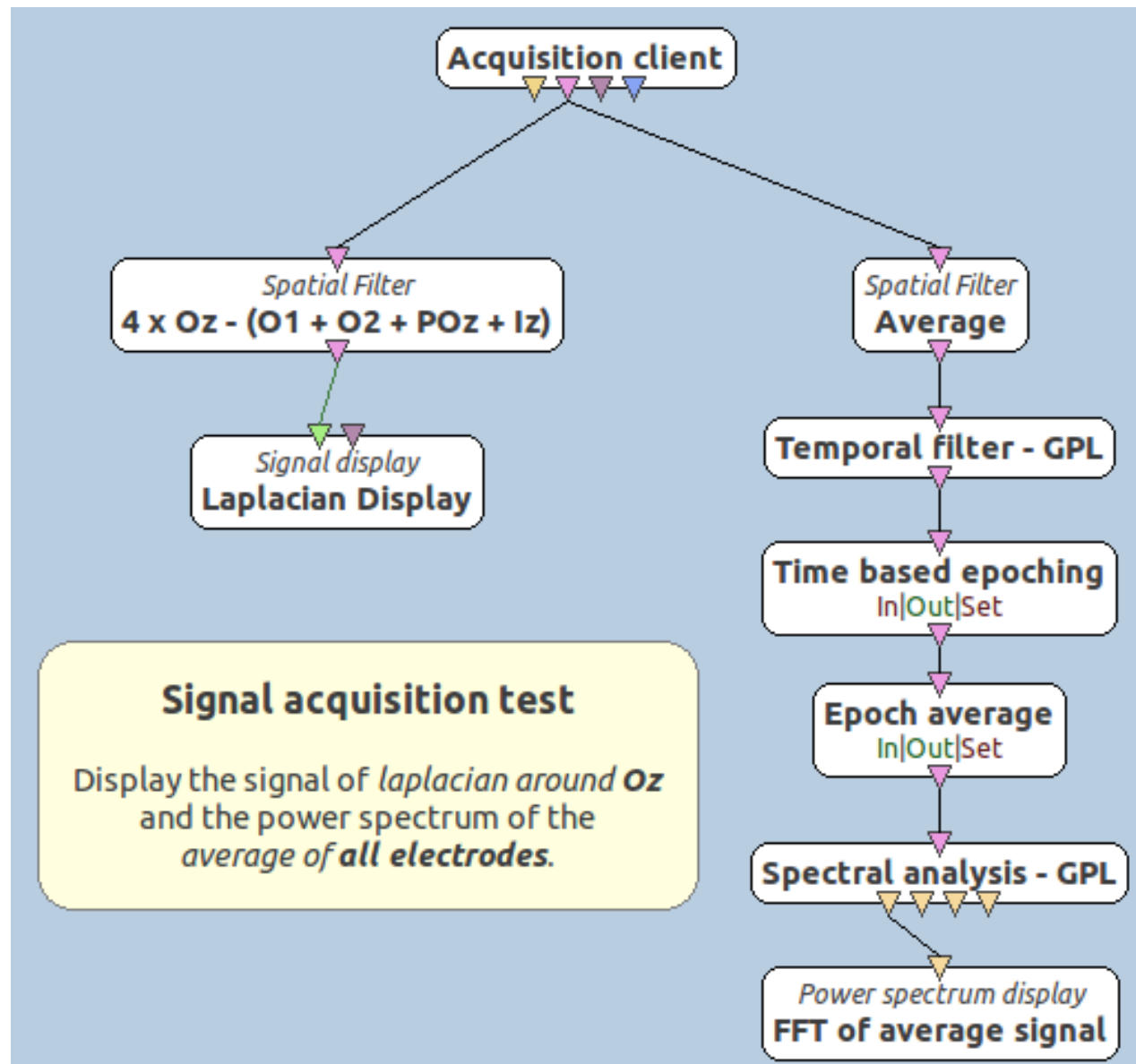
GRAPHICAL LANGUAGE

**POWERFUL SIGNAL
PROCESSING**
















EXAMPLE BCI DEMOS

TUTORIAL SCENARIOS

Easy to use graphical language



Box algorithms list

- +  Acquisition and network IO
- +  Advanced Visualization
- +  Classification
- +  Data generation
- +  Evaluation
- +  Examples
- +  Feature extraction
- +  File reading and writing
- +  Scripting
- +  Signal processing
- +  Stimulation
- +  Streaming
- +  Tests
- +  Tools
- +  Visualization

Generic stream reader
In|Out|Set

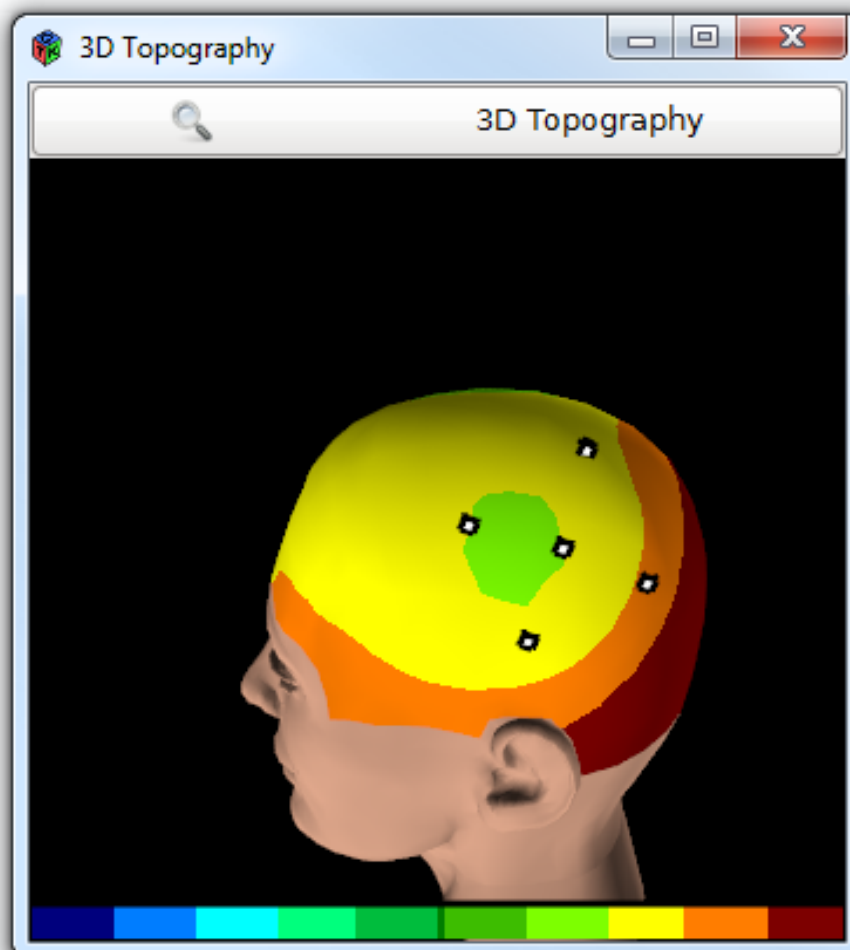
Temporal filter - GPL
8-15 Hz

Simple DSP
 x^2
In|Out|Set

Signal average

Epoch average
In|Out|Set

3D Topography
In|Out|Set



Example of scenario using the 3D topography

OpenViBE - Turning thoughts into actions

Online Video

<https://www.youtube.com/watch?v=pHdQ9daL95w>



- Virtual Reality application can be created in **Ogre3D** and connected to **OpenViBE** with **VRPN**
- Virtual Reality Peripheral Network (VRPN)

Install and Run OpenVibe

<http://openvibe.inria.fr/downloads/>

Thanks