Tutorial - Get started with OpenViBE

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Abstract / Short description

OpenViBE is a world-wide known generic software that enables the design, testing and real-time use of Brain-Computer Interfaces (BCIs). It enables the acquisition, processing and visualization of neurophysiological data. Its graphical interface notably allows the creation of processing pipelines without writing code. It is one of the main experimental software used by the BCI community, compatible with a lot of acquisition systems on the market, and also relevant for other communities in need of real-time physiological data processing and feedback. It is used in various domains such as health, entertainment, robotics and sports. This tutorial is a pedagogical introduction on how to get started with OpenViBE. The goal is to provide all necessary knowledge for attendees to be able to develop their experimental pipeline in OpenViBE. We will present the main functionalities of OpenViBE, i.e., how to acquire a neurophysiological signal, process it and transform it into feedback.

Keywords

OpenViBE software, Experiment implementation, Online data processing, BCI/NF, Opensource.

Prerequisites

There is no prerequisite to participate in our workshop. Anyone interested in learning how to use the OpenViBE software is welcome. We would only appreciate it if the participants install the latest version of OpenViBE on their computer beforehand.

- For Windows users, an installer of the latest version of OpenViBE can be found <u>here</u>.
- For Linux and OSX users, the steps to build OpenViBE from source can be found here. Note that OSX support is very new and does not offer the best user experience yet.

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Tentative Schedule for a 3-hour session - Monday, July 8th pm.

Tutorial - All you no	eed to know to begin with OpenViBE -
chairs: Thomas Prampart & Léa Pillette	
2 pm	Welcome and introduction to
	OpenViBE (interface and main
	functionalities)
3 pm	BCI paradigms (e.g., motor imagery-
	based BCI or P300 speller) in
	OpenViBE
3:45 am	Creating your experimental pipeline
	scheduled with Lua in OpenViBE
4:45 am	Conclusion