BCI SOCIETY
Next Generations

Open-source Python tools for BCIs

Schedule

Topic	Presenter	Duration	Format
Introduction	P. Clisson	5	Lecture
How do BCIs actually work?	R. Bertrand-Lalo	12	Lecture
Q&A		10	Discussion
Riemannian geometry for BCIs: intuition and theory	M. Congedo	15	Lecture
PyRiemann: overview	S. Chevallier	5	Notebook
Q&A		10	Discussion
Mother Of All BCI Benchmark: overview	S. Chevallier	12	Lecture
Mother Of All BCI Benchmark: practice	R. Bertrand-Lalo	5	Notebook
Q&A		10	Discussion
Timeflux: overview	P. Clisson	10	Lecture
Timeflux: designing a P300 speller	P. Clisson	10	Code and demo
Q&A		15	Discussion

Raphaëlle Bertrand-Lalo

Raphaëlle Bertrand-Lalo is an engineer specialized in signal processing and data science, with a master degree in cognitive neurosciences. She is an open-source believer and a major contributor to the Timeflux project. She is currently working as a Machine Learning developer at Paris Fire Fighter Brigade.

Marco Congedo

Marco Congedo is a Research Director of CNRS (Centre National de la Recherche Scientifique), working at GIPSA-lab in Grenoble (France) since 2007. He graduated at the University of Padova and obtained a PhD at the University of Tennessee, Knoxville. His research interests include applied mathematics for EEG data analysis and brain-computer interface.

Sylvain Chevallier

Sylvain Chevallier is assistant professor at Université Paris-Saclay and a machine learning and signal processing researcher at the Laboratoire d'Ingénierie des Systèmes de Versailles (LISV). His field of expertise includes neural networks, transfer learning and Riemannian geometry. He is an open science enthusiast and a regular contributor to the MOABB and PyRiemann projects.

Pierre Clisson

Pierre Clisson is a software engineer and a neuro technology consultant, with extensive experience in the fields of IT security, artificial intelligence, and data engineering. He is accredited by the French Ministry of Research as a R&D expert. He is the creator and lead developer of Timeflux, an open-source framework for the acquisition and real-time processing of biosignals.

Repository

https://github.com/timeflux/workshops