



Workshop

g.tec's Brain-Computer Interface Workshop for Control, Assessment and Rehabilitation

Time & Date: Monday November 28th, 10:30AM-4:00 PM

Location: Auditorium A009

*Centre for the Advanced Pharmaceutical and Health Technologies
Lithuanian University of Health Sciences
Sukileliu av. 13, Kaunas, Lithuania*

About the workshop

Research groups all over the world have been successfully working on a direct connection between the human brain and a computer, a so-called Brain-Computer Interface (BCI). During this workshop, we will demonstrate major concepts in BCI systems, including types of sensors, signal processing, and applications. New trends like embodiment, coma assessment and communication, stroke rehabilitation, and invasive ECoG based systems will also be explained. We will invite people from the audience to participate in the live demonstrations in which they can don electrode caps and use BCIs.

Speakers

Milena Korostenskaja, PhD. leads the Functional Brain Mapping and Brain-Computer Interface Program at the Neuroscience Institute, AdventHealth Orlando. Currently, she is working closely with the Epilepsy Center at AdventHealth Orlando to help guide epilepsy surgery by creating individual functional brain maps for surgical candidates. Dr. Korostenskaja's main goal is to establish the Adaptive Neurotechnology Clinic, where the latest innovations in the field of brain-computer interfaces (BCIs) will be utilized to improve patient's diagnosis, treatment, and quality of life.

Woosang Cho, MSc from g.tec medical engineering GmbH was working on EEG and MEG based BCI projects in the University of Tübingen, Germany and at g.tec. Now he is involved in validating a ready-to-use BCI system and developing new methods for stroke rehabilitation. He will give a theoretical overview about BCIs and will also hold the practical sessions.



Workshop Schedule



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10:30 – 11:15	Adaptive Neurotechnologies: Revolutionizing Treatments and Minds, Dr. Milena Korostenskaja
11:20 – 12:00	Non-invasive/invasive brain-computer interface systems, including current and future applications, Woosang Cho
12:00 – 13:00	Lunch break
13:00 – 13:50	Hand on sessions: BCI live experiments (Part I) – for motor rehabilitation and cognitive assessment
14:00 – 16:00	Hands on sessions: BCI live experiments (Part II) – for speller, sphero, and painting
16:00	Discussion and questions

Time & Date:

Thursday November 28th, 10:30AM-4:00 PM

Location: Auditorium A009

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For more information, please contact Woosang Cho: cho@gtec.at