Brain-Computer Interface (BCI)
workshop & hands-on seminar

g.tec's brain-computer interface workshop during the SfN 2011

Guest speakers: Gerwin Schalk (Wadsworth Center, NY), Brendan Allison (TUG, Graz)
g.tec medical engineering GmbH, Austria

BCI research is one of the most fascinating fields in neuroscience. Mental tasks or focused attention lead to changes in the brain's activity patterns which can be measured, analyzed and classified. The transformation of these changes into a control signal allows to communicate or to control external devices just by thinking - an amazing technology with the potential to help patients who are about to loose any other way to interact with their environment.

This workshop informs about the major methodological approaches, technical issues, application examples, opportunities and limitations, current trends in BCI research and many more.

In a practical session, an introduction of hard- and software used for research and development will be given. Participants can perform live experiments such as P300-spelling, motor imagery BCI for rehabilitation and SSVEP control.

Intended audience: This workshop is intended for people interested in learning the new skill of BCI communication and for people who are interested in combining BCI technology into their field of expertise. The workshop contains material about human computer interaction, biosignal analysis in off-line and real-time mode, rehabilitation, biomedical and electrical engineering, computer science and Virtual Reality.

program

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>06:30-07:30 pm</td>
<td>The 4 concepts to realize a BCI system</td>
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<tr>
<td>07:30-07:45 pm</td>
<td>EEG based BCI systems and g.SAHARA dry electrodes</td>
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<td>07:45-08:00 pm</td>
<td>Life demonstration of the P300 speller</td>
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<td>08:00-08:30 pm</td>
<td>ECoG and BCI2000</td>
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<tr>
<td>08:30-09:00 pm</td>
<td>Life demonstration of a real-time BCI system (for rehabilitation)</td>
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<tr>
<td>09:00-09:30 pm</td>
<td>Hybrid BCIs</td>
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speakers

We are happy to announce Dr. Gerwin Schalk and Dr. Brendan Allison as guest speakers at the workshop showing their latest results on EEG/ECoG based BCI systems, who contributed important scientific publications to the BCI community and are very active in the field. The workshop is presented by Dr. Christoph Guger and DI Robert Prueckl, who are working on EEG, ECoG and spike based BCI projects at g.tec. They are involved in projects of the European Commission like Vere, Renachip, ALIAS, Brainable, Decoder and Better and will also talk about recent developments in these projects.

Attendees must be registered at the Neuroscience 2011. Additionally please contact vogt@gtec.at to register for the workshop because space is limited.

Date: November 12th, 2011 (6:30 PM - 9:30 PM).
Venue: Walter E. Washington Convention Center, Room 156.
Brain-Computer Interface (BCI)

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g.tec’s brain-computer interface workshop during the SfN 2011
g.tec medical engineering Austria together with invited guest speakers

registration form

Please fill in and fax back to: +43 7251 22240 39
or send it to vogt@gtec.at

Name & Degree (as to appear on conference materials):

________________________________________________________________________

Institution/Affiliation:

________________________________________________________________________

Department:

________________________________________________________________________

Business Address:

________________________________________________________________________

City: ____________________________________________ State: _______ Zip: __________

Business Phone: _________________________________

E-mail Address (important for receiving the confirmation)

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