

# Workshop: Current and future applications of non-invasive and invasive BCIs



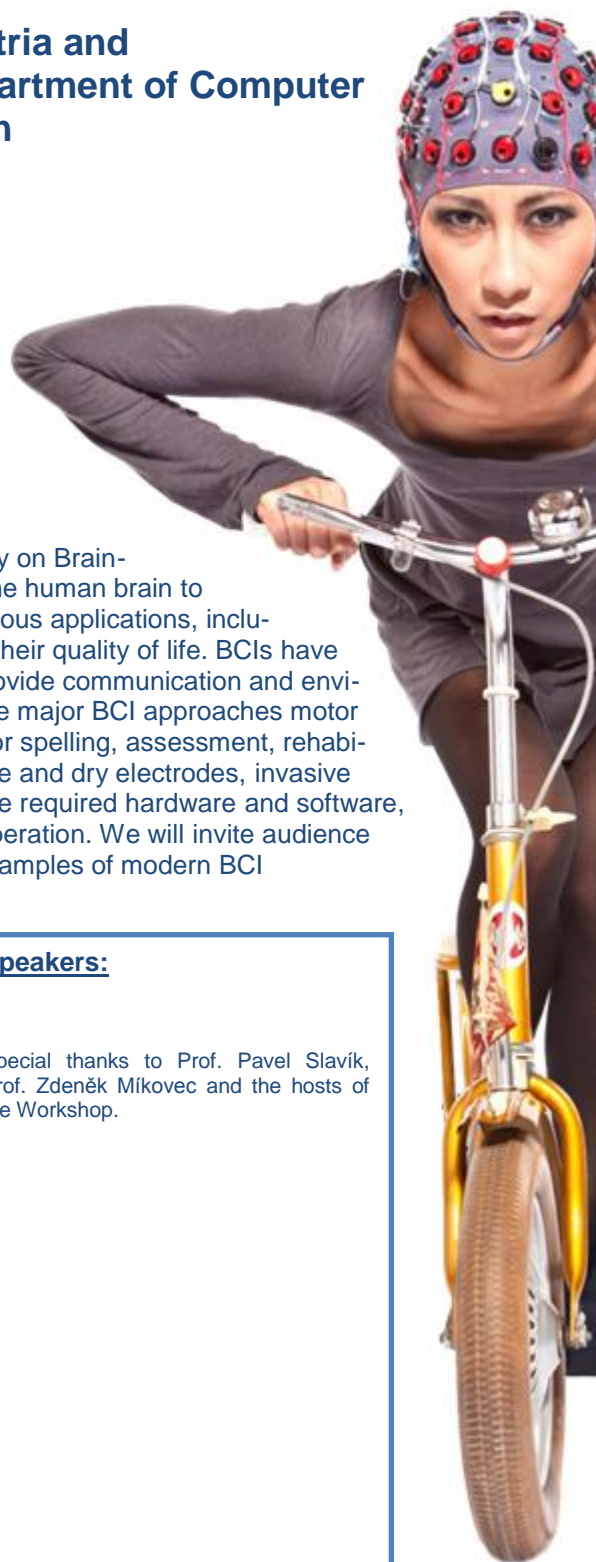
**g.tec medical engineering Austria and  
Czech Technical University in Prague – Department of Computer  
Graphics and Interaction**

**October 19<sup>th</sup>, 2015**

**Venue:** Faculty of Electrical Engineering  
Karlovo náměstí 13  
121 35 Praha 2  
Tel: +420 224 357 557  
Fax: +420 224 357 556  
<http://dcgi.felk.cvut.cz/>

## About the Workshop

Research groups all over the world have been working enthusiastically on Brain-Computer Interfaces (BCIs), which provide a direct connection from the human brain to a computer. BCIs translate brain activity into control signals for numerous applications, including tools to help severely disabled users communicate and improve their quality of life. BCIs have been used to restore movement, assess cognitive functioning, and provide communication and environmental control. During this workshop, we will demonstrate the three major BCI approaches motor imagery, P300 and steady state visual evoked potentials (SSVEP) - for spelling, assessment, rehabilitation and robot control. We will also explain new directions like active and dry electrodes, invasive ECoG systems and advanced VR control. The audience will see all the required hardware and software, procedures for cap mounting, training and classifier setup, and BCI operation. We will invite audience members to participate in live demonstrations, providing real-world examples of modern BCI performance in field settings.



## Program:

- 10:00 Introduction to major methodological approaches of BCI & introduction to hard- and software
- 11:00 **Sporka Adam, Pošusta Antonín.:**  
*Myoelectric Signals for Text Entry*
- 11:30 **Sieger Tomáš:**  
*Emotion-related neurons deep in the human brain*
- 12:00 Lunch break
- 13:00 Hands-on sessions:  
BCI live experiments
- 16:00 Final discussion & questions

Attendance is free of charge but registration is required due to limitation of space. Please contact Francisco Fernandes: [fernandes@gtec.at](mailto:fernandes@gtec.at)  
**N.B.:The workshop will be held in English.**

## Speakers:

Special thanks to Prof. Pavel Slavík, Prof. Zdeněk Míkovec and the hosts of the Workshop.



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## Registration Form:

Please fill in and fax back: 0043 7251 22240 39  
or email it to Francisco Fernandes: [fernandes@gtec.at](mailto:fernandes@gtec.at)

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

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Institution/Affiliation:

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Department:

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Business Address:

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City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Business Phone: \_\_\_\_\_

E-mail Address (important for receiving the confirmation)

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