

Monday, June 10, 2019	
Conference Center Room Aqua 1	
BR41N.IO The Brain-Computer Interface Designers Hackathon organized by g.tec	
10:30 – 11:00	<p>BR41N.IO Brain-Computer Interface Designers Hackathon: SPECIAL SESSION: Current and future applications of brain-computer interfaces Chair: Alex Lechner (g.tec medical engineering)</p> <p>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. This session demonstrates how BCIs translate brain activity into control signals for numerous applications, to help severely disabled users to communicate, to restore movement or to control robots and devices and improve their quality of life.</p>
11:30 – 12:30	<p>SPECIAL SESSION: Brain-Machine-Interfaces for Grasping and Manipulation: From Basic to Clinical Applications Chairs: Surjo Soekdar (University Hospital of Tubigen, Germany) and Jose Azorin (Universidad Miguel del Elche, Spain)</p> <p>This session will review emergent neurotechnologies for restoration and rehabilitation of hand function after brain injury or neurological disease (15 min/speaker).</p>
14:00-14:30	<p>BR41N.IO Brain-Computer Interface Designers Hackathon: SPECIAL SESSION: How to run real-time BCI applications Chair: Alex Lechner (g.tec medical engineering)</p> <p>Several major BCI approaches can be used. Approaches like motor imagery, P300 or steady state visual evoked potentials (SSVEP) - for spelling, assessment, rehabilitation and robot control, will be explained. Further, we will also explain new directions like active and dry electrodes, invasive ECoG systems and advanced VR control.</p>
16:30-17:00	<p>BR41N.IO Brain-Computer Interface Designers Hackathon: SPECIAL SESSION: Unicorn Brain Interface for Artists, Scientists and Engineers Chair: Alex Lechner (g.tec medical engineering)</p> <p>The demonstration will show, how to use the Unicorn hardware and software, procedure for cap mounting and how to start with the BCI applications.</p>

Tuesday, June 11, 2019	
Conference Center Room Aqua 1	
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00:00 – 16:00	<p>SPECIAL WORKSHOP BR41N.IO Brain-Computer Interface Designers Hackathon Chair: Alex Lechner (g.tec medical engineering)</p> <p>During the day, everyone is invited to visit the BR41N.IO Hackathon and get a look at the creative and scientific brain-computer interface applications projects that the participants have been creating overnight.</p>
16:00-17:00	<p>BR41N.IO Brain-Computer Interface Designers Hackathon SPECIAL SESSION: Final Presentations of the BR41N.IO Brain-Computer Interface Designers Hackathon Chair: Alex Lechner (g.tec medical engineering)</p> <p>This is your chance to finally see the creative and innovative brain-computer interface results of the BR41N.IO Hackathon. Every hackathon team presents their ideas and results to a jury of well-known Brain and BCI experts. The most innovative, creative, applicable, unconventional projects get to win the one of the BR41N.IO Art & Brain Prizes. The BR41N.IO Hackathon Ceremony takes place on Wednesday, June 12 16:00-17:00 in room Aqua 1.</p>

Wednesday, June 12, 2019	
Conference Center Room Aqua 1	
BR41N.IO The Brain-Computer Interface Designers Hackathon organized by g.tec	
16:00-17:00	<p>BR41N.IO The Brain-Computer Interface Designers Hackathon SPECIAL SESSION: Hackathon Winners Ceremony Chair: Alex Lechner (g.tec medical engineering)</p> <p>This is the official ceremony of the BR41N.IO Brain-Computer Interface Designers Hackathon where the winners will be announced and awarded with the BR41N.IO Art & Brain Prize by the Jury.</p>