Minisymposium on

New Dimensions in Brain-Machine Interfaces

Wednesday, November 9, 2011
1:00-6:00pm
Fung Auditorium, Powell-Focht Bioengineering Hall
University of California San Diego

The minisymposium highlights latest advances and emerging directions in brain-machine and neuron-silicon interface technology and their applications to neuroscience and neuroengineering. Topics include high-dimensional EEG and ECoG systems, wireless and unobtrusive brain-machine interfaces, flexible bioelectronics, real-time decoding of brain and motor activity, and signal processing methods for intelligent human-system interfaces.

PROGRAM

1:00-1:10pm Welcome
1:10-1:50pm Interventional neurophysiology: emerging practice paradigm and new technology for the OR and ICU
Jeff Gertsch, UC San Diego
1:50-2:30pm A low-power system-on-chip design for real-time ICA based BCI applications
Wai-Chi Fang, National Chiao-Tung University, Taiwan
2:30-3:10pm Developing practical non-contact EEG electrodes
Yu Mike Chi, Cognionics
3:10-3:50pm A new platform for BCI: from iBrain to the Stephen Hawking project
Philip Low, Neurovigil, Stanford, and MIT
3:50-4:20pm Coffee break
4:20-5:00pm Interdisciplinary approaches to design high performance brain-machine interfaces
Todd P. Coleman, UC San Diego
5:00-5:40pm Evolving data collection and signal processing methods for intelligent human-system interfaces
Scott Makeig, UC San Diego
5:40-6:00pm Panel discussion

Organized by:
Center for Advanced Neurological Engineering
Institute for Neural Computation: http://inc.ucsd.edu
Institute of Engineering in Medicine: http://iem.ucsd.edu

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