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*