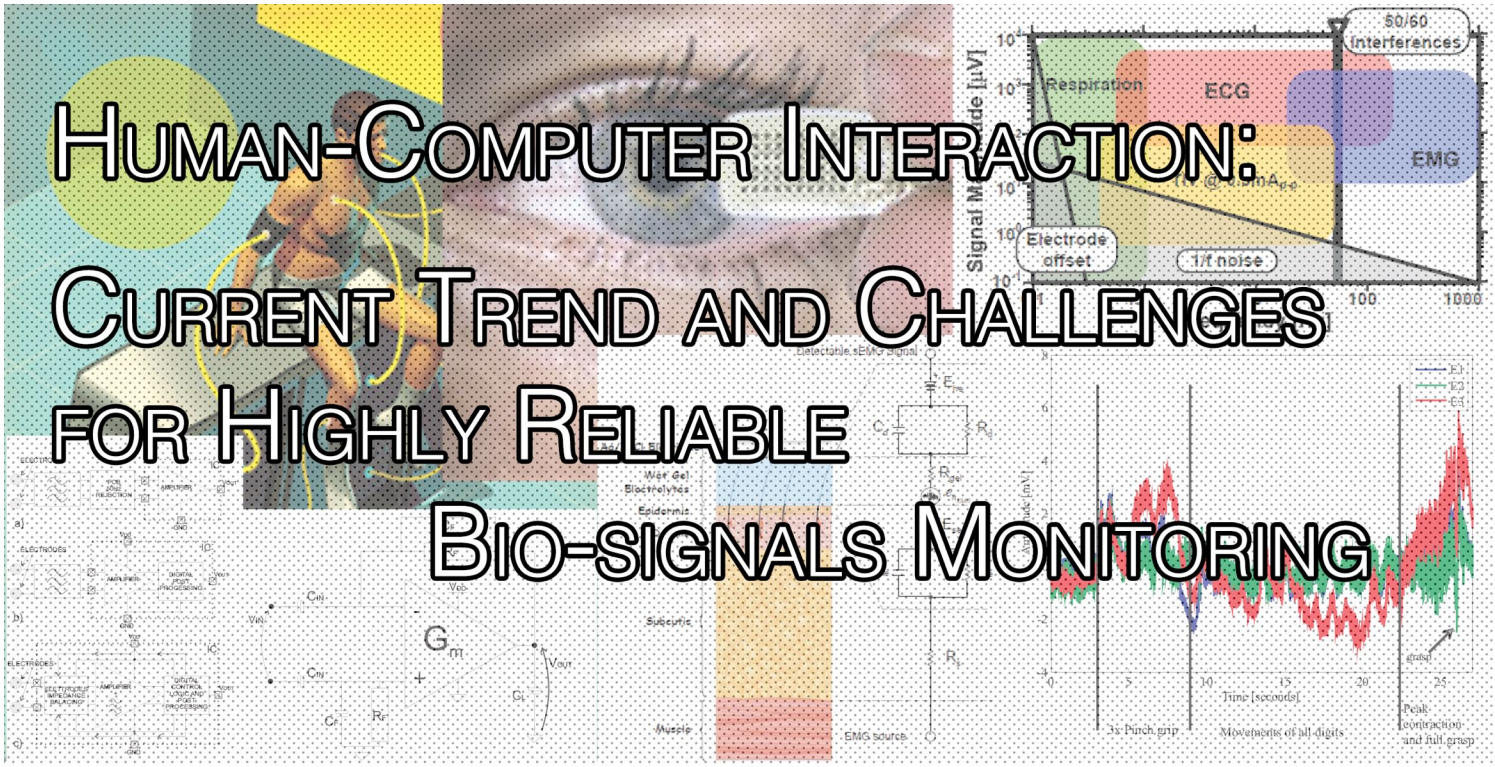

Human-Computer Interaction: Current Trend and Challenges for Highly Reliable Bio-signals Monitoring

DECEMBER 21TH, 2015
5:00 PM

Aula 0-15, Scuola Superiore di Catania (Via Valdisavoia, 9)

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ORAZIO AIELLO

Summary

- An overview of the electronic advances in Neural Implants with the respective challenges and issues will be considered.
- The read-out front-ends to monitor bio-potential signals such as brain signals (the electroencephalogram EEG), heart electrical activity (the electrocardiogram ECG) and muscle electrical activity (the electromyogram EMG) will be emphasized.
- A practical example about how to perform a bio-signal monitoring system will be provided.

About the speaker:

Dr. Orazio Aiello received the BSc in Electronics and the M.Sc in Microelectronic engineering from the University of Catania, respectively in 2005 and 2008. He also graduated from the *Scuola Superiore di Catania* (University of Catania) in 2009 and he received the PhD from the Polytechnic of Turin in 2013.
He has several years of experience as a consultant, employee and researcher in Semiconductor companies such as STMicroelectronics and NXP and well-renowed Universities like Monash University in Melbourne, University of Sydney and National University of Singapore.
His main research interests includes the reliability of front-end integrated circuits (ICs) for System-Basis-Chip (SBC) in harsh operating environment; EMC techniques and testing procedures at IC and PCB level; Brain-computer interface and neural signal processing. He recently works for new energy-efficient ICs solutions for the Internet of Things (IoT).

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