Seminar Announcement

As part of the teaching in Bioengineering of Motor Rehabilitation within the Biomedical Engineering Master Degree Course

06/12/2024, 14:30-16:30, Plesso Montedago-Trifogli, Aula 155/4

Models and techniques for modular motor control assessment in humans
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Abstract

The analysis of how the central nervous system manages the redundancy in the musculoskeletal system is often carried out through the modular motor control models. The identification of the coordination structures and the definition of related parameters requires the optimization of several models and advanced signal processing algorithms. In this talk, proposals for adaptive and objective
estimation algorithms will be presented, together with sample results from the analysis of healthy and pathological movement.

Bio

Simone Ranaldi is an Assistant Professor at Roma Tre University. His research activity involves mathematical models and processing techniques for the investigation of modular structures in human motor control patterns, with applications ranging from the characterization of human movement to the development of optimized algorithms for the control of prosthetic and or assistive devices. Since 2021, he teaches Neural Engineering in the Masters Degree in Biomedical Engineering, Roma Tre University.

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