IEEE AMC2018
(THE 15TH INTERNATIONAL WORKSHOP ON ADVANCED MOTION CONTROL)

9 - 11 MARCH 2018, TOKYO, JAPAN

Special Session on

"Sensors and techniques for human movements detection: applications in motion control"

Organized by

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Call for Papers

Theme: The measurement of human movements plays an important role on the design of advanced mechatronic systems, providing realistic and intuitive interfaces for teleoperation of dexterous robots, haptics, medical and rehabilitation devices, control of bionic prostheses, and body tracking for robot learning. In this session, the design and implementation of innovative sensor technologies for assessing human movements will be presented, covering novel measurement principles, sensor modeling and validation, advanced signal processing, and multisensor data fusion. In addition, applications of human movement tracking sensor systems in practical motion control will also be presented.

Topics of interest include, but are not limited to:

Sensors and transducers for measurement of human movements
Brain-computer interfaces
Electromyography-based techniques
Optical tracking technologies
Exoskeletons
Wearable and glove-based sensors
Artificial intelligence methods for human movements processing
Multisensor data fusion
Measurement of human movements for advanced motion control

- **IES Technical Committee Sponsoring the Special Session (if any):**