

Sensors Council

2021 IEEE INTERNATIONAL WORKSHOP ON METROLOGY FOR INDUSTRY 4.0 & IoT

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METROIND4.0&IoT

CALL FOR PAPERS for the Special Session on

SENSORS AND TECHNIQUES FOR SPORT AND PHYSICAL ACTIVITY

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ABSTRACT

The field of sport and physical activity is rapidly changing according to emerging opportunities fostered by technological development. This implies the development of new training and competition paradigms, the involvement of new stakeholders (e.g. data analysts), and the availability of a big amount of information on the health and behavior of exercise practitioners. Given the fundamental role of sport and physical activity at different levels (socioeconomic, health and entertainment), sports industries have a variety of opportunities to penetrate the market. However, current open challenges include sensors data management, the development of sensors and techniques specifically designed for sport and physical activity, the selection of relevant variables, parameters and metrics, the identification of metrological standards, and the development of efficient services to improve performance and fitness and to reduce the risk of injury and illness. This special session welcomes original contributions aiming at facing these and other open challenges in the field of sport and physical activity.

TOPICS

Submissions are welcomed on (but not limited to):Physiological sensors and techniques

- Sensors and techniques for motion capture and biomechanics
- Reliability, validity and accuracy of sports sensors
- Wearables and Body Sensor Networks
- · Variables, parameters and metrics for exercise monitoring
- Signal processing techniques and sensors data management
- Artificial intelligence
- Tests and exercise protocols for the validation of measurement systems and algorithms
- Applications in the field of sport and physical activity
- Wireless sensor networks and IoT

Visit the conference website as well as Facebook page for each specific call and additional news.

tp://www.metroind40iot.org/special-session

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