



an Open Access Journal by MDPI

Combining Sensors and Multibody Models for Applications in Vehicles, Machines, Robots and Humans

Guest Editors:

Prof. Dr. Javier Cuadrado

Laboratory of Mechanical Engineering, Department of Naval and Industrial Engineering, University of La Coruña, 15403 Ferrol, Spain

Prof. Dr. Miguel A. Naya

Department of Naval and Industrial Engineering, University of La Coruña, 15403 Ferrol, Spain

Deadline for manuscript submissions: closed (31 August 2021)



Message from the Guest Editors

Dear Colleagues,

The combination of physical sensors and computational models to provide additional information about system states, inputs, and/or parameters, in what is known as virtual sensoring, is becoming more and more popular in many sectors, such as the automotive, aeronautics, machinery, robotics, and human biomechanics sectors.

This Special Issue seeks works dealing with the many challenges that must be overcome when developing multibody-based virtual sensors. These challenges include the selection of the fusion algorithm and its parameters, the coupling or independence between the fusion algorithm and the multibody formulation, magnitudes to be estimated, the stability and accuracy of the adopted solution, optimization of the computational cost, real-time issues, and implementation on embedded hardware. We also welcome studies on the application of multibodybased virtual sensors to, for example, vehicles, mobile or humanoid robots, assistive orthotic and prosthetic devices, or the measurement and analysis of human movement.

For more information, please clink: mdpi.com/si/57103.

Prof. Dr. Javier Cuadrado Prof. Dr. Miguel Ángel Naya Villaverde *Guest Editors*



mdpi.com/si/57103





an Open Access Journal by MDPI

Editor-in-Chief

Message from the Editor-in-Chief

Prof. Dr. Vittorio M. N. Passaro Dipartimento di Ingegneria Elettrica e dell'Informazione (Department of Electrical and Information Engineering), Politecnico di Bari, Via Edoardo Orabona n. 4, 70125 Bari, Italy

Sensors is a leading journal devoted to fast publication of the latest achievements of technological developments and scientific research in the huge area of physical, chemical and biochemical sensors, including remote sensing and sensor networks. Both experimental and theoretical papers are published, including all aspects of sensor design, technology, proof of concept and application. Sensors organizes Special Issues devoted to specific sensing areas and applications each year.

Author Benefits

Open Access : free for readers, with article processing charges (APC) paid by authors or their institutions. **High Visibility:** indexed within Scopus, SCIE (Web of Science), PubMed, MEDLINE, PMC, Ei Compendex, Inspec, Astrophysics Data System, and other databases. **Journal Rank:** JCR - Q2 (Instruments and Instrumentation) / CiteScore - Q1 (Instrumentation)

Contact Us

Sensors Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/sensors sensors@mdpi.com X@Sensors_MDPI