



#### The 22<sup>nd</sup> IFAC World Congress Yokohama, Japan, 2023

### **OPEN INVITED TRACK PROPOSAL**

# Human Machine Symbiosis: Perspectives on emerging digital trends and their social impact.

Code for submitting contributions: p9875

#### Track proposed by:

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**IFAC Technical Committee for evaluation:** TC 9.5. Technology, Culture and International Stability (TECIS)

#### Abstract:

This invited track session welcomes contributions to interdisciplinary research at the convergence point of emerging systems and the social sciences concerned with the development of new technologies that valorise the human. This track addresses challenges and opportunities associated with engaging human communities in the development of complex socio-technical semiautomated systems. The emerging waves of digital technologies continue to impact and disrupt communities in ways heretofore never seen, offering both wonderful potential and perilous danger to the human condition and our shared global society.

Technology developments leads to dramatic changes in international stability, global systems of information, commerce, politics, finance, and natural resources have had both negative and positive consequences for international stability. This track welcomes contributions from multidisciplinary academic and practice-based communities that attempt to understand these problems from a human centred systems engineering perspective. We seek to understand and address social effects associated with the proliferation of automation and control systems and strategies that improve health and education, reduce inequality, and encourage economic growth whilst tackling emerging threats linked to the UN Sustainable Development Goals.

## Topics of the proposed Open Invited Track are specifically related (but not limited to) the following application areas:

Human-centred systems, Artificial Intelligence and Applications, Control & Political Stability, Cross-cultural Aspects of Engineering, Education for TECIS, Engineering Ethics, Diversity and Inclusion, Innovation Management, Intelligent Systems and Applications, Social Networks, Sustainable Design and Control Technology in Post-conflict Regions, New technologies for the environment, Tele-medical Systems, Innovation management, Young Engineers in Control

#### For Manuscript Preparation please look at:

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Upon submission, make sure to use the Open invited track code: p9875

22<sup>nd</sup> IFAC World Congress website: <u>https://www.ifac2023.org/</u>