

Call for Papers *IEEE Transactions on Human-Machine Systems*
Special Issue on
“Featured Research from the 2nd International Conference on Human-Machine Systems”

This special issue (SI) is motivated by the success of the IEEE Systems, Man and Cybernetics Society’s 1st *International Conference on Human-Machine Systems*, held in 2020 (*ICHMS 2020*). *ICHMS* is intended to foster the development and dissemination of research for advancing the science and engineering of human-machine system at multiple levels, including systems, computing technology, and human-automation interaction. The conference stresses methodological innovation, novel results and implications for practice in a broad range of application areas, including transportation and autonomous vehicle systems, the Internet of Things, smart communities, motorized cyber-physical systems, and human-robot interaction (HRI). *ICHMS 2020* drew-in approximately 200 participants (despite the COVID-19 pandemic) and generated ~150 peer reviewed papers. The meeting was selective in its acceptance rate and the conference yielded a refereed proceedings publication. The quality of contributions to this meeting was such that many of the papers could have been considered for publication as regular papers in the *IEEE Transactions on Human-Machine Systems (THMS)* with unique extensions.

This SI seeks high-quality and significant extensions of contributions to *ICHMS 2021*. *THMS* has not previously published regular papers as extensions of conference proceeding publications. For this reason, any manuscript submitted to the present SI, and ultimately published in *THMS*, will be required to present an extension of a research study presented at the conference of no less than 40% new results, inferences and conclusions for the scientific community.

Submissions to the SI will align with the call for contributions to *ICHMS 2021* and must also fall within the scope of the Journal. We welcome a broad range of contributions for advancing understanding of human-machine systems, whether through analysis, design, operations or other aspects. Potential contributions may address, but are not limited to, the following topics: companion technology; brain-machine interfaces and systems; human- artificial intelligence (AI) interaction; cognitive computing and engineering; interactive and wearable computing and devices; collaborative intelligence systems and applications; and human factors engineering

The SI will be published over two issues of *Transactions on Human-Machine Systems*. The SI will serve as a forum for multidisciplinary and systematic research investigations presented at the 2nd *ICHMS*. In specific, the publication is expected to reveal new guidelines for design and engineering of technology to support human information processing and decision making in advanced systems control. It is important to note that any submissions to the special issue must have been accepted to the 2nd *ICHMS* in order to be considered by *THMS* for potential publication. *THMS* will consider both full regular papers and technical correspondences.

Important Dates:

Conference date: September 7-10, 2021

SI Manuscript initial submission: August 31 - October 31, 2021

Decision from first round of reviews: October 31 - December 31, 2021

Revised manuscript submission: December 31, 2021 - February 28, 2022

Notification of final decision: February 28, 2022 - April 30, 2022

Final manuscript submission: April 30, 2022 - June 30, 2022

Expected publication: August 31, 2022

Papers should be submitted through <http://mc.manuscriptcentral.com/thms> , with a cover letter that contains the statement: “This manuscript is being submitted to the Special Issue “Featured Research from the 2nd International Conference on Human-Machine Systems””.

For detailed submission information, please refer to “Information for Authors” at <http://www.ieeesmc.org/publications/transactions-on-human-machine-systems/special-issues>.

Guest Editors:

David Kaber, University of Florida, USA, dkaber@ufl.edu

Giancarlo Fortino, University of Calabria, Italy, giancarlo.fortino@unical.it

David Mendonca, Rensselaer Polytechnic Institute, USA, mendod@rpi.edu