CALL FOR PAPERS
IEEE TRANSACTIONS ON
AUTOMATION SCIENCE AND ENGINEERING

Special Issue on

Human-machine Fusion Decision-making for Emergency Handling

The human-machine fusion decision-making is closely related to human-computer interaction means. The emergency system needs to provide more and more interactive tools for command and decision makers to complete the decision. From the perspective of information input, new input modes such as voice and gesture input should be widely introduced. From the perspective of information output, the display mode should change from plane display to stereo holographic display, and the acousto-optic technology should be widely used to enhance the display effect. In particular, the brain-computer interface technology should be actively introduced to enable the decision-making system to directly input information into the human brain for consciousness display, and directly accept the human brain information, so as to achieve the effect of human intelligence and machine immediate response.

The objective of this special issue is to present the latest progress and development of methods, techniques, and tools for emergency automation. Topics of interest include but are not limited to

- Human-machine fusion decision for emergency automation.
- Automatic monitoring, diagnosis and early warning of emergency scenarios.
- Automation of emergency response, decision-making recommendation and rescue dispatching.
- Robot-assisted disaster rescue technology.
- Robot-assisted disaster or disease treatment related technology
- Human-machine fusion for multi-modal coalition emergency response
- Human factors in emergency handling
- Human-computer interaction in emergency

Important Dates
- Manuscript submission: Jun. 30, 2023
- Completion of the first-round review: Aug. 31, 2023
- Completion of the second-round review: Oct. 31, 2023
- Final manuscripts due: Dec. 31, 2023
- Tentative publication date: Feb. 29, 2024

Guest Editors

Lead Guest Editor: Prof. Edmond Q. Wu
Shanghai Jiao Tong University, China
edmondqwu@sjtu.edu.cn

Prof. Guangyu Zhu
Beijing Jiaotong University, China
gyzhu@bjtu.edu.cn

Prof. Jianqiang Li
Shenzhen University, China
ljq@szu.edu.cn

Prof. Hui Yu
University of Portsmouth, UK
hui.yu@port.ac.uk
Paper Submission
All papers are to be submitted through the IEEE’s Manuscript Central for Transactions on Automation Science and Engineering http://mc.manuscriptcentral.com/t-ase. Please select the Manuscript Category “Topic-Based Special Issue” under “Type” in Step 1 and this specific Special Issue in Step 6 of your article’s submission process. All manuscripts must be prepared according to the IEEE Transactions on Automation Science and Engineering publication guidelines (http://www.ieee-ras.org/publications/t-ase). Please address inquiries to edmondqwu@sjtu.edu.cn.