Call for Papers

IEEE Aerospace and Electronic Systems Magazine

Special Issue on Space Domain Systems

With the emerging access to space, many new engineering systems elements are developing such as space avionics, space traffic management, and space domain awareness. Likewise, the worldwide interest in space for communications, navigation, surveillance, and transportation requires innovative solutions to deal with the impending congestion and coordination of space assets. Future designs of space components such as satellites will require a systems approach to facilitate the efficient solutions for data exchange, estimation, power, and connectivity. To maintain designed goals, coordinated control, orbital analysis estimation, and environmental analysis can support effective monitoring and management of the engineered systems for space operations. To highlight the technical advances in the space domain, the IEEE Aerospace and Electronic Systems Magazine is inviting papers for a special issue in this field that cover aspects of design, operations, and deployment of space systems.

Key Topic Areas

Novel papers are sought relating to space domain systems engineering including:

- Avionics techniques for navigation, timing, and cyber protection
- Satellite detection, characterization, and behavioral analysis
- Dynamic object and orbital analysis for tracking and conjunction analysis
- Space Situational Awareness including alarm monitoring, operations and assessment
- Space response including threat assessment, collision avoidance, and alert monitoring
- Sensor management including access, command and control, and systems management
- Decision Intelligence for operator visualization, training and performance
- Space traffic management including sensor networks and signal fusion
- Space environment awareness techniques for resilient satellite protection
- System engineering and modeling towards deployable systems

Manuscripts should be submitted using the manuscript submission web site for the IEEE Aerospace and Electronic Systems Magazine at http://sysaes.msubmit.net. Manuscripts will be peer reviewed according to the standard IEEE AESS process. For information on paper submission, prospective authors should consult *Information for Authors* at http://sysaes.msubmit.net.

Tentative schedule for submission and review

- Submission deadline: 28 July 2021
- First review due: 15 Sept 2021
- Revised manuscript due: 1 Nov 2021
- Second review due: 15 Dec 2021
- Final manuscript due: 15 Jan 2021

Guest Editors

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