



Digital Twin Strategies for Systems Engineering

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Deadline for manuscript
submissions:

closed (29 February 2024)

Message from the Guest Editors

Dear Colleagues,

Digital twins (DT) are defined as virtual models of systems where a combination of sensor-based data, advanced analytics, and modeling and simulation techniques are used to replicate the behavior and performance of a system in real-time. This Special Issue summarizes these advances to inform the systems engineering community. Interested topics for submission to be considered in this Special Issue include, but are not limited to, the following:

- DT for system conceptualization and modeling;
- DT for system performance and diagnosis;
- Strategies for promoting traceability;
- DT strategies for system maintenance, testing, verification, and validation;
- Strategies and lessons learned for integrating digital twin technology across the SE lifecycle;
- DT for system visualization in its operational environment;
- Integration of model-based systems engineering (MBSE) methods;
- Models capturing functional and non-functional aspects of systems;
- Integration of simulation tools and sensors to extend system performance.





systems



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