

IEEE

Call for Papers

SYSTEMS JOURNAL

A PUBLICATION OF THE IEEE SYSTEMS COUNCIL



Special Issue on “Injecting Intelligence for Reliability and Resilience: Theories, Models, and Applications for Complex and System of Systems”

As modern systems grow in complexity, scale, and interconnectivity, ensuring their reliability and resilience has become essential and critical. The ability of systems and system of systems (SoS) to maintain functionality under varying and challenging conditions and recover from disruptions is crucial for sustainability, safety, and efficiency across multiple domains. From cyber-physical infrastructures and artificial intelligence-driven networks to socio-economic ecosystems and disaster response mechanisms, system reliability and resilience are critical concerns that transcend traditional disciplinary boundaries, e.g., the system-of-systems perspective and approach become imperative.

This special issue of the *IEEE Systems Journal* aims to address systems-level challenges and solutions for reliability and resilience in complex and interconnected environments, most times known as SoS. It seeks to foster cross-disciplinary collaboration and introduce innovative theories, models, and real-world applications that align with the journal’s mission of addressing large-scale systems and system-of-systems challenges.

Topics of interest include, but are not limited to: (1) Foundational Theories and Models for System of Systems (SoS) Reliability and Resilience; (2) Resilience Engineering and Adaptive Design; (3) Complex Systems and SoS Reliability and Interoperability; (4) Disaster Response and Critical Infrastructure Protection; (5) AI and Data-Driven Approaches to SoS Resilience; (6) Real-time System Monitoring, Diagnostics, and Failure Prediction; (7) Case Studies and Applications related to SoS.

Submission Guidelines:

All submissions will undergo the IEEE Systems Journal’s rigorous peer-review process. Authors should submit their manuscripts through [IEEE Systems Journal’s submission portal](#), selecting the paper type “**SI: Injecting Intelligence into System of Systems (SoS) for Reliability and Resilience**” to ensure consideration for this special issue. Authors should also reference this special issue in their cover letters.

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Important Dates

Manuscript Submission Deadline:

December 1, 2025

First Review Decision:

March 1, 2026

Revised Manuscript Submission:

April 1, 2026

Final Decision Notification:

June 1, 2026

For further information, please contact any of the Guest Editors.