

Editorial

We are pleased to release the second issue of this volume of the **Journal of Networking Technology** with the papers outlined below.

In the opening paper, **“Robustness and Influence Dynamics in Complex Networks: A Unified Framework for Structural Resilience and Diffusion Processes”**, the authors advocated a unified framework that integrates percolation-theoretic robustness metrics with canonical influence propagation models. They assessed network robustness using the persistence of the giant connected component, global efficiency, and a scalar robustness index, evaluating degradation under both random failures and targeted attacks. They have shown that optimal network design requires context-aware balancing of redundancy, centrality distribution, and connectivity patterns

In the next paper, **“A Multi-Layer Analytical Framework for Reliability Assessment of IoT-Blockchain Systems Using Sensor-Driven Transaction Modeling”**, the authors proposed a multi-layer analytical framework for assessing reliability in IoT-blockchain systems using sensor-driven transaction modelling. They used statistical correlation analysis via Point-Biserial coefficients, probabilistic modeling through logistic regression, and comprehensive reliability metrics including Transaction Success Rate (TSR) and Mean Transactions to Failure (MTTF). They proved that transaction reliability is driven by localised, context-specific factors rather than broad linear relationships, necessitating targeted interventions including sensor-specific calibration, oracle optimisation, and smart contract edge-case handling.

In the last paper, **“Fractal Analysis of Long-Range Dependence in IoT-Blockchain Time Series: A Methodological Framework Using Hurst Exponent, R/S, and DFA,”** the authors presented a methodological framework for analyzing long-range dependence (LRD) in IoT-blockchain time series through fractal analysis. The results showed strong power-law scaling, with linear log-log relationships confirming scale-invariant dynamics. The authors claim that these findings have a notable impact on IoT-blockchain ecosystems, particularly in predictive modelling, multi-scale anomaly detection, and adaptive resource allocation.

We hope that this research reflects ongoing high-tech research in the networking world.

Editors