

Editorial

We release the second issue of the sixteenth volume of the **Journal of Electronic Systems** with the research outlined below.

In the first paper, “**Missing-Value Behavior and Sensor Drift Analysis in Distributed PM2.5 Microclimate Sensing Networks for Trustworthy Environmental Intelligence,**” the authors introduced a framework for evaluating missing-value behavior and sensor drift within a large-scale PM2.5 microclimate sensing network. Initially, the authors highlighted the impact of pollution on the environment in detail. The findings show severe acquisition instability in selected sensing nodes, while feature-level evaluation indicates that wind-related variables exhibit the highest missingness. The primary contribution in this paper is the proposition of a scalable methodology for evaluating sensing reliability in distributed smart-city infrastructures.

In the following paper, “**Artificial Intelligence-Driven Universal Verification Methodology for Low-Power Semiconductor Design Verification,**” the authors introduced a framework for LLM-driven semiconductor verification using structured prompt orchestration, prompt chaining, semantic context engineering, and token-aware optimisation. The analyses used to evaluate the framework include single shot and multi shot prompting, hierarchical prompt templates, staged reasoning pipelines, context management strategies, and token utilization efficiency for complex RTL verification tasks. The authors claim that the proposed framework contributes to the development of scalable AI assisted verification systems.

The third paper, “**Attention Message Passing Network for Intelligent Electronic Circuit Topology Analysis,**” presented a graph-based analytical framework for intelligent circuit understanding using a Heterogeneous Graph Attention Message Passing Network for intelligent Electronic Design Automation (EDA) frameworks. The framework demonstrated how graph-based learning architectures can capture circuit connectivity patterns, identify dominant signal propagation pathways, and discover hierarchical functional modules within electronic systems.

We hope that the papers published in this issue mark technical elegance.

Editors