

Special Issue on LLMs and Embodied AI for Next-Generation IoT and Wireless Communication Systems

The KSII Transactions on Internet and Information Systems (TIIS, SCIE and SCOPUS indexed) announces the special issue on **LLMs and Embodied AI for Next-Generation IoT and Wireless Communication Systems**. The integration of Large Language Models (LLMs) (e.g., GPT, DeepSeek, LLaMA) and Embodied Artificial Intelligence (AI) marks a transformative leap in intelligent system design. LLMs have demonstrated powerful capabilities in logical reasoning, semantic understanding, and multi-modal signal interpretation, while embodied AI enables agents to interact with and adapt to dynamic environments through perception and action. When jointly applied to Internet of Things (IoT) and wireless communication systems, these technologies offer unprecedented potential in enhancing signal processing, intelligent spectrum cognition, network optimization, and system-level security. This special issue invites high-quality and original contributions that explore theoretical advancements, algorithmic innovations, and practical applications at the intersection of LLMs, embodied AI, and IoT-oriented wireless systems. Both academic and industrial research contributions are welcome. Topics of interest include, but are not limited to:

Topics:

- Survey/tutorial articles to be welcome in these topics
- Large language model-based signal interpretation and control for IoT
- Embodied AI for network-aware autonomous agents
- Multi-modal sensing and fusion via LLM-empowered frameworks
- LLM-enhanced spectrum management and cognitive radio networks
- Secure and privacy-preserving communication using LLM reasoning
- LLMs for zero-shot/few-shot learning in wireless edge environments
- Robotic systems and embodied AI for edge-cloud collaboration
- Generative AI for anomaly detection and attack mitigation in IoT
- LLMs for protocol design, optimization, and cross-layer decision making

We welcome both theoretical and experimental contributions, including novel protocols, proof-of-principle demonstrations, engineering advances, and system-level evaluations.

Submission Guideline:

1. All submissions should follow the TIIS journal's author guidelines (<https://www.itiis.org/author-guide>), where longer papers with more technical details are permitted. Particularly, survey and tutorial articles are **NOT** subject to page limits.
2. When you submit a paper to this special issue, select 'Journal Special Issue 3' manuscript type. If a different manuscript type is selected, then the submitted paper will **NOT** be considered for this special issue.

Schedule (may change based on circumstances):




1) Paper submission deadline: November 30, 2025

2) First notification of paper evaluation: January 15, 2026

3) Second notification of paper evaluation: March 15, 2026

4) Publication: April, May, or June of 2026

Editors for the special issue

	<p>Special Issue (SI) Chair: Prof. Guan Gui (IEEE Fellow), College of Telecom. and Information Engineering, Nanjing University of Posts and Telecommunications, China</p> <p>Homepage: https://www.scholat.com/greatin</p> <p>Area of Interest: AI, Intelligent IoT, Intelligent Sensing, Network</p> <p>Publications: https://scholar.google.com/citations?user=bhWOdtAAAAAJ&hl=en</p>
	<p>SI Editor: Prof. Dusit (Tao) Niyato (IEEE Fellow), College of Computing and Data Science, Nanyang Technological University, Singapore</p> <p>Homepage: https://personal.ntu.edu.sg/dniyato/</p> <p>Area of Interest: Generative LLM, Mobile Generative LLM, Quantum Computing and Networking, Edge General Intelligence</p> <p>Publications: https://scholar.google.com/citations?user=T8sVhLMAAAAJ&hl=en</p>
	<p>SI Editor: Prof. Tomoaki Ohtsuki (IEEE Senior), Dept. of Information and Computer Science, Keio University, Japan</p> <p>Homepage: https://www.ohtsuki.ics.keio.ac.jp/home</p> <p>Area of Interest: Machine Learning, Activity Recognition, Information Theory, Biomedical Engineering, IoT</p> <p>Publications: https://scholar.google.com/citations?user=f1MnkCIAAAAJ&hl=en</p>