Special Issue

Next Generation Multimodal Semantic Communication Networks

Message from the Guest Editors

With the rapid development of deep learning, mobile edge computing, deep reinforcement learning, semantic communication, and other fields, traditional communication techniques have not been able to meet the requirements of large bandwidth and low delay in the next generation networks. Meanwhile, the semantic communication framework has shown its potential advantages in many fields, such as video conferencing and remote sensing, etc. Therefore, new algorithms, including multimodal data semantic understanding and processing, joint source-channel coding, etc., should be explored. The topics of interest include, but not limited to:

- Cross-modal semantic analysis;
- Context awareness algorithms based on multimodal data;
- Task-oriented multimodal data transmission;
- Multitask semantic communications;
- Multimodal data fusion;
- Joint source-channel coding;
- Multimodal remote sensing data processing;
- Al-driven semantic communication networks.

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Deadline for manuscript submissions

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