# Internet of Things in Intelligent Transportation Infrastructure

## Overview:

The Internet of things (IoT), as an important part of the new generation of information technology, connects any object to the Internet according to the agreed protocol through radio frequency identification, global positioning system, and other information sensing equipment for information exchange and communication. With the continuous development of IoT technology, it has injected new power into its further development and improvement. Internet of vehicles (IoV) is the development focus of IoT, and the improvement of its connection capability enables the application of IoV to be upgraded from vehicle entertainment to unmanned driving, fleet arrangement and management, and traffic intelligent service. With the release of the market potential of IoV, the transportation cost will also drop significantly, and more transformation opportunities will emerge in the traditional intelligent transportation industry. As an important part of intelligent transportation, intelligent city, intelligent village, and intelligent park, IoT intelligent infrastructure plays an important role in providing high-quality public services, reducing costs, and achieving sustainable development. At present, IoT intelligent infrastructure has a wide range of demand around the world, and has become an important innovation and industrial development force in this field.

Intelligent infrastructure use Internet of Things technology to connect the Internet of Vehicles in the area. According to different seasons and times, pedestrian flow, vehicle flow and weather conditions and other statistical data and sensor data, adjust equipment communication bandwidth and vehicle networking scale and other facility parameters, and remotely control intelligent infrastructure service areas to optimize public services and improve efficiency and reduce costs. In recent years, the rise and development of low-power wide area networks (LPWAN) have provided a huge impetus for the widespread application of IoT intelligent infrastructure. Especially after the LoRaWAN protocol entered the field of Internet of Vehicles, its long distance, low power consumption, self-organization, security and controllability have promoted a large number of innovations in related fields around the world, and the system is composed of LoRaWAN devices. And for the module, the application supports the use of LoRaWAN protocol for the intelligent infrastructure control system of the Internet of Things to apply to different regional markets around the world, and even a comprehensive solution innovation chain that can fully meet the global market demand and management requirements.

With the rapid development of emerging industries such as artificial intelligence and the Internet of Things, the construction of intelligent transportation systems has become a strategic development trend. The Internet of Things infrastructure is an essential part of the intelligent transportation infrastructure system. Implementing the fine management of the Internet of Things infrastructure can not only realize the remote monitoring of the Internet of Things infrastructure, but also can change the equipment communication bandwidth and the scale of the Internet of Vehicles when the traffic volume increases according to the external traffic demand, greatly reducing the transportation cost. This special issue aims to introduce the latest discoveries and applications of IoT technology in the emerging field of intelligent transportation infrastructure. We are soliciting original articles that have not yet been published and have not yet been considered by any other journals.

## Topics

The list of possible topics includes:

- Internet of Things in Intelligent Transportation Infrastructure

- Intelligent Transportation System under Big Data
- Intelligent Transportation Integrating Environmental Information Collection
- Wireless GPRS/CDMA Communication Technology for Intelligent Transportation Facilities
- Deployment and Management Of 5G Base Station of Intelligent Transportation
- Intelligent Transportation System Based on Zigbee And GPRS Network
- Intelligent Streetlight Information Management Platform in Intelligent Transportation
- Video Monitoring of Intelligent Transportation
- Edge Computing and Useful Data Upload of Intelligent Transportation Gateway
- Intelligent Electric Vehicle Charging with Information-Centric Networking
- Natural Design for Social Network Applications of IoV
- Method for Network Coding Packets in Content-centric Networking Based Networks
- Versatile Deployment Framework for information-centric Networks
- Measurement Technology for Software-defined Networking of IoV
- Simulation and Emulation of Network Measurement Approaches of IoV
- Inference Theory and Technology Network Measurement of IoV
- Digital Twins of Internet of Vehicles and Intelligent Transportation Infrastructure

## Important Dates

First submission deadline: May 30, 2022
Notification of first decision: August 2022
First revision submission deadline: December 2022
Notification of final decision: February 2023
Final manuscript (camera ready) submission deadline: April 2023
Issue of Publication: June 2023

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