## Security and Communication Networks

# Special Issue on

**Systems** 

# **Cybersecurity in Distributed Smart**



Nowadays, different kinds of smart systems and technologies are widely used in different fields. System that performs some autonomous operations according to decisions based on available data can be considered as smart system. It usually uses different components (sensors, actuators, control unit, and communication unit) to perform functions of sensing, actuation, and control. Smart systems are by their nature in most cases distributed and decentralized, consisting of large number of interconnected smart nodes (e.g., wireless sensor networks, Internet of Things, smart grid, smart camera networks, intelligent transportation systems, smart industrial control systems, and smart agriculture automation systems). They often rely on distributed algorithms in process of data acquisition, processing, and forwarding. Such environment is vulnerable to many security threats that may affect regular processes (e.g., data acquisition, aggregation, and routing). Therefore, the development and implementation of novel adequate security solutions and mechanisms (as well as proper adaptation of existing ones) in these systems are an imperative. Security solutions in distributed smart systems will usually employ distributed cooperative algorithms, since they do not reckon on any centralized infrastructure.

This special issue aims to bring together and present recent innovative solutions dealing with cybersecurity in different kinds of distributed smart systems. The papers that present novel techniques, algorithms, and mechanisms that will help in detection and prevention of security threats in these environments are welcome. High quality review papers that provide systematic state-of-the-art overview and identify future research directions will also be considered.

Potential topics include but are not limited to the following:

- ▶ Security analysis and assessment in distributed smart systems
- ▶ Intrusion detection and prevention in distributed smart systems
- ▶ Malicious node detection in distributed smart systems
- ▶ Secure routing in distributed smart systems
- ▶ Secure data aggregation in distributed smart systems
- ► Cryptographic solutions for distributed smart systems
- ▶ Security architectures and frameworks for distributed smart systems
- Security protocols for distributed smart systems
- ▶ Authentication mechanisms in distributed smart systems
- ▶ Privacy enhancement solutions in distributed smart systems
- ▶ Security and privacy solutions in smart healthcare systems
- Security and privacy solutions in smart wearable devices

Authors can submit their manuscripts through the Manuscript Tracking System at https://mts.hindawi.com/submit/journals/scn/cdss/.

Papers are published upon acceptance, regardless of the Special Issue publication date.

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