# Special Issue

# Symmetry and Asymmetry in IoT Security

## Message from the Guest Editors

Symmetry and asymmetry play important roles in the field of Internet of Things (IoT) security. The rapid growth of the Internet of Things (IoT) has brought numerous opportunities and challenges, particularly in the realm of security. As IoT devices become integral parts of our daily lives, ensuring the confidentiality, integrity, and availability of IoT data is of paramount importance. The importance of symmetry and asymmetry in IoT security lies in the need to address different security requirements and constraints within IoT ecosystems. For example, symmetric encryption offers efficiency and confidentiality, while asymmetric encryption provides secure key exchange, authentication, and digital signatures. Additionally, symmetry and asymmetry concepts can also be applied to fingerprinting, a biometric identification technique that analyzes unique patterns of an individual's fingertips. Symmetry can assist in accurate feature extraction and matching, enhancing the overall reliability of fingerprint-based identification systems in IoT...

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### Message from the Editor-in-Chief

Symmetry is ultimately the most important concept in natural sciences. It is not surprising then that very basic and fundamental research achievements are related to symmetry. For instance, the Nobel Prize in Physics 1979 (Glashow, Salam, Weinberg) was received for a unified symmetry description of electromagnetic and weak interactions, while the Nobel Prize in Physics 2008 (Nambu, Kobayashi, Maskawa) was received for the discovery of the mechanism of spontaneous breaking of symmetry, including CP symmetry. Our journal is named *Symmetry* and it manifests its fundamental role in nature.

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