

CFP: Advancements in Distributed Ledger Technology (DLT) for the Internet of Things (IoT)

A Special Issue of Elsevier IoT Journal; Engineering Cyber Physical Human System

Internet of Things (IoT) is paving the way for different kinds of devices to be connected and properly communicate at a mass scale. However, conventional mechanisms used to sustain security and privacy cannot be directly applied to IoT whose topology is increasingly becoming decentralized. Distributed Ledger Technologies (DLT) on the other hand comprises varying forms of decentralized data structures that provide immutability through cryptographically linking blocks of data. To be able to build reliable, autonomous and trusted IoT platforms, DLT has the potential to provide security, privacy and decentralized operation while adhering to the limitations of IoT devices. The marriage of IoT and DLT technology is not very recent. In fact many projects have been focusing on this interesting combination to address the challenges of smart cities, smart grids, internet of everything and other decentralized applications, most based on blockchain structures. In this special issue, the focus is on the new and broader technical problems associated with the DLT-based security and backend platform solutions for IoT devices and applications. Topics of interest include, but are not limited to:

- Distributed ledger theory in IoT.
- Identity management in DLT for IoT.
- Novel IoT applications based on DLT including blockchains.
- Experimental studies based on DLT-based IoT schemes.
- Scalability, Security, Privacy, Storage optimizations in DLT for IoT.
- Auditability and privacy compliance of sensor data using DLT.
- Use of DLT in cloud, edge and fog computing.
- DLT applied to smart cities, smart grids and internet of everything.

Important Dates

Submissions Deadline: October 15th, 2018 Second Reviews Due/Notification: March 1st, 2019
First reviews Due: January 1st, 2019 Final Manuscript Due: April 1st, 2019
Revision Due: February 1st, 2019 Publication Date: Late 2019

Submissions

Each unique submission or a revision must be submitted to Elsevier IoT Journal through [evise](https://www.evise.com/profile/#/IOT/login) at <https://www.evise.com/profile/#/IOT/login>. The complete guide and submission policies can be reached at <https://www.elsevier.com/journals/internet-of-things/2542-6605/guide-for-authors>. Submissions are expected to be accompanied with keywords and points to appropriate reviewers to expedite the review process.

Guest Editors

- Prof. Bhaskar Krishnamachari, *University of South California (USC)*, USA.
- Prof. Raja Jurdak, *CSIRO's Data61*, Australia.
- Dr. Jens Jelitto, *IBM Research*, Zurich, Switzerland.
- Prof. Suayb S. Arslan, *MEF University*, Istanbul, Turkey. (Lead Guest Editor)