

CFP: Network Coding for the Internet of Things (IoT)

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

Internet of Things (IoT) allows different types of devices to be connected and properly communicate at a mass scale. Smart devices collect enormous amount of information, transmit them for storage and analysis. Such operation style leads to heavy load on network communication links, computation resources and required storage space. On the other hand, Network Coding (NC) is shown to be a fundamental tool to achieve a trade-off between communication capacity and computational complexity by enabling intermediate relay nodes to encode the incoming packets before forwarding. NC can be used in various ways for IoT to facilitate the network, storage and computational resources to provide scalability for ever-increasing smart devices. In fact many projects have been focusing on this tool being applied to IoT to address the challenges of smart cities, smart grids, internet of everything. In this special issue, the focus is on the new and broader technical problems associated with the NC-based back-end platform solutions for IoT core network, devices and applications. Topics of interest include, but are not limited to:

- NC for Wireless Sensor Networks
- Network Communication Capacity of IoT topologies
- Network-Coded Computation for Fog/Edge.
- Coded Caching for IoT platforms
- NC-based Cloud Storage
- NC-based Cellular Networks
- Novel IoT protocol designs for bandwidth/storage efficiency
- Network Coding applied to smart cities, smart grids and internet of everything.

Important Dates

1. Submissions Deadline: March 30th, 2020
2. First reviews Due: July 30th, 2020
3. Revision Due: August 31st, 2020
4. Second Reviews Due: Sept. 30th, 2020
5. Final Manuscript Due: Oct. 20th, 2020
6. Publication Date: Mid. 2021

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>. Please make sure that you select the name of the special issue **SI:NC for IoT** when you submit. 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. Elif Haytaoglu, *Pamukkale University*, Denizli, Turkey.
- Prof. Suayb S. Arslan, *MEF University*, Istanbul, Turkey. (Lead Guest Editor)