



**Special Issue on
Collaborative Networking Technologies for Content-oriented Future Networks**

Call for Papers

With the increasing usage of numerous content-oriented applications and services including Web news, live videos, video on demand, user-generated content sharing, etc, the Internet has evolved into a large-scale content sharing infrastructure. However, the address-driven TCP/IP architecture does not fit with the content-oriented applications and services fundamentally.

For this end, the academia and industry have explored plenty of collaborative networking technologies for content-oriented future networks in terms of architecture, naming, addressing, routing, forwarding, caching, NFV, network slicing, QoS, traffic analysis, etc. For instance, the collaborative architecture based on ICN and TCP/IP is utilized to resolve the issues relevant to content delivery and data transmission in the specific scenarios or fields such as Internet of Things, satellite-aerial-terrestrial network, tactile Internet, Ad hoc network, Network in Box, smart cities, etc. Moreover, many ongoing and emerging collaborative caching and network slicing technologies have been adopted in content-oriented 5G (and beyond) mobile network, which could increase connected devices, improve network bandwidth and reduce transmission latency. Besides, there exist other collaborative technologies at the aspect of cross-layer design, content security and privacy, network management, and network intelligence, etc.

This special issue aims to present the state-of-the-art of collaborative networking technologies for promoting the current networks towards the content-oriented future networks. Specifically, topics of interest include, but are not limited to:

- Collaborative technologies in network architecture
- Collaborative technologies in naming and addressing
- Collaborative technologies in routing and forwarding
- Collaborative technologies in caching and content delivery
- Collaborative technologies in NFV and network slicing
- Collaborative technologies in QoS and traffic analysis
- Collaborative technologies in cross-layer design
- Collaborative technologies in content security and privacy

- Collaborative technologies in network management
- Collaborative technologies in network intelligence

This special issue will mainly focus on improved versions of selected contributions from CollaborateNet 2020 (<http://collaboratecom.org/collaboratenet-workshop/>), and also call for papers from the open. The guest editor maintain the right to reject papers they deem to be out of scope of this special issue.

Authors should submit a PDF version of their complete manuscript via ITL submission portal at (<https://mc.manuscriptcentral.com/itl>) according to the important dates below. The manuscripts should be formatted according to the ITL guidelines: (<https://onlinelibrary.wiley.com/page/journal/24761508/homepage/forauthors.html>).

Important Dates

Manuscript submission due: November 30, 2020

Author notification due: March 1, 2021

Final decision due: May 31, 2021

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