

Special Issue on  
**Topology Control in Emerging Mobile  
Networks**

# CALL FOR PAPERS

Emerging networks are about culture change schemes, which shift humanities research towards broadly collaborative, interdisciplinary engagements in contrast to the largely solitary efforts with characterizing traditional humanities research. Currently, this special issue (SI) of Wireless Communications and Mobile Computing (WCMC) aims at new trends, developments, emerging technologies, and new industrial standards in the area of topology control in emerging mobile networks (EMN).

The proposed SI disseminates quality research work and provides a platform for academic and industry professionals, including models and systems, new directions, novel applications associated with the security, and acceptance of mobile network devices and systems. Topology control is a basic technique for distributed computing to alter the underlying network to reduce the cost of distributed algorithms. Topology control is a general technique used in mobile computing to alter the underlying networks, and it is a basic technique in EMN. Recently, it has a large-scale use by the WCMC research community. The main aim of topology control in WCMC includes saving energy, reducing interference between nodes, and extending lifetime of the network. Topology control algorithms have been divided into two subproblems: topology construction and topology maintenance. Such applications include characterizing how well a sensing field is monitored and how well each pair of sensors is mutually connected in WCMC. In the dynamic environments, mobile networks are robust and the topology may vary with the moving nodes. Providing topology control for mobile computing is still a challenging issue, especially in heterogeneous or mobile environments.

In this special issue, the journal will focus on systems, protocols, and applications for the latest development about topology control in EMN, from theory to its applications, including taxonomy, comparative study, and open issues. Original contributions as well as review articles, designs, implementation, experiments, and analyses that provide novel theories, frameworks, and solutions to the challenging problems are welcome.

Potential topics include but are not limited to the following:

- ▶ Service in topology control in EMN
- ▶ New architecture for topology control in EMN
- ▶ Security issues for topology control in EMN
- ▶ Measuring and estimating in EMN
- ▶ Network layer protocols and transport layer protocols in EMN
- ▶ Coverage in EMN
- ▶ Network connectivity in EMN
- ▶ Intelligent applications for topology control in EMN
- ▶ Energy efficiency in EMN
- ▶ Performance of density in EMN
- ▶ Topology Control Applications for mobile data storage
- ▶ Topology Control Applications for visualization
- ▶ Topology control for Sensing

Authors can submit their manuscripts through the Manuscript Tracking System at <https://mts.hindawi.com/submit/journals/wcmc/tcem/>.

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

**Lead Guest Editor**

Naixue Xiong, Northeastern State  
University, Tahlequah, USA  
[xionгнаixue@gmail.com](mailto:xionгнаixue@gmail.com)

**Guest Editors**

Sajid Hussain, Fisk University,  
Nashville, USA  
[shussain@fisk.edu](mailto:shussain@fisk.edu)

Jaime Lloret, Polytechnic University of  
Valencia, Valencia, Spain  
[jlloret@dcom.upv.es](mailto:jlloret@dcom.upv.es)

**Submission Deadline**

Friday, 8 June 2018

**Publication Date**

October 2018