

Call for Papers: IEEE Transactions on Network Science and Engineering Special Issue on “Economics of Modern Networks”

Many modern networks are becoming increasingly heterogeneous, dynamic, and complex. The need for smart and self-organizing network designs has become a central research issue in a variety of applications and scenarios. Proper economic mechanism design will go hand-in-hand with technology advances in solving many complex design and operation issues in these modern networks. This special issue solicits the state-of-art economic modeling and analysis results on a wide range of modern networks, such as Internet, wireless networks, energy networks, transportation networks, social networks and supply chain networks. We are particularly interested in contributions that can address issues in more than one type of networks. The topics of interest include (but not limited to):

- Dynamic network pricing for QoS guarantees
- Smart pricing for wireless data services
- Mechanism design of cloud computing, fog computing, and edge computing
- Sharing mechanisms of network resources
- Impact of net neutrality and emerging economic constraints on network design
- Incentives for renewable energy investment and integration
- Incentives for energy storage operations
- Mechanisms for network security
- Behavior economic modeling of networks
- Dynamic and stochastic games in networks
- Cooperative game and bargaining models for networks
- Incentive mechanism design for crowdsourcing and crowdfunding
- Economic models of sharing economy platforms
- Mechanism design for transportation systems
- Risk management in multi-tier supply chain networks
- Impact of social networks in operations and supply chain management

Prospective authors are invited to submit their manuscripts electronically through the online system (<https://mc.manuscriptcentral.com/tNSE-cs>) and select the correct special issue. Please make sure to adhere to the Transactions guidelines with the same page limit as regular papers (<http://www.computer.org/portal/web/TNSE/author>). Submissions should not be published or currently under review by another conference or journal.

Important Dates

- **Manuscripts due: September 1, 2018**
- Peer reviews to authors: January 1, 2019
- Revised manuscripts due: February 15, 2019
- Second-round reviews to authors: March 15, 2019
- Final accepted manuscript due: April 15, 2019

Guest Editors

- Jianwei Huang (lead): Department of Information Engineering, The Chinese University of Hong Kong (jwhuang [at] ie.cuhk.edu.hk)
- Costas Courcoubetis: Engineering Systems and Design, Singapore University of Technology and Design (costas [at] sutd.edu.sg)
- Mihaela van der Schaar: Department of Engineering Science, Oxford University (mihaela.vanderschaar [at] eng.ox.ac.uk)
- Biying Shou: Department of Management Sciences, City University of Hong Kong (biyishou [at] cityu.edu.hk)
- Jean Walrand: Department of Electrical Engineering and Computer Sciences, University of California – Berkeley (walrand [at] berkeley.edu)