CALL FOR PAPERS

IEEE Transactions on Network Science and Engineering
Special Issue: Network Science in Biological and Bio-inspired Systems

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TOPIC SUMMARY:
Network science offers a novel framework for systematically exploring the structure and functions of biological and bio-inspired systems, which has attracted much attention within the IEEE and beyond. Indeed, networks have been widely used, not only to represent the couplings of various types, e.g., synapses that connect neurons (connectome), physical contacts between proteins (interactome), chemical reactions of metabolism, gene regulation, and swarming interactions, but also to analyze the functions and underlying working mechanisms of these systems. Given the growing activity of both theory and applications across computer science, physics and biology, the aim of this special issue is to provide a venue for researchers with different backgrounds to discuss the fruitful results, recent advances and challenges in the interdisciplinary area of biological and bio-inspired networks.

The topics of interest for this special issue include (but are not limited to):
- Brain networks
- Protein-protein interaction networks
- Gene regulatory networks
- Network medicine
- Networked swarm intelligence
- Biological network inference
- Dynamics of and on biological networks
- Control principles in biological systems

IMPORTANT DATES:
- Manuscripts due: 12/31/2017
- Peer reviews to authors: 02/15/2018
- Revised manuscripts due: 03/15/2018
- Second-round reviews to authors: 04/15/2018
- Final accepted manuscript due: 05/15/2018

SUBMISSION GUIDELINES:
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