Special Issue

Machine Learning and 6G Wireless Communication

Message from the Guest Editor

As the modern 5G and beyond communication system becomes more complicated, its characterization and optimization likewise become increasingly challenging. Traditional analytical methods often require either suboptimal approximation or strong assumption. Moreover, the computation time might be too long for real-time systems. Machine learning is a promising solution to the above challenges. It applies the universal approximation property of deep neural networks and a data-driven approach to bypass the complicated system model. In this way, new dimensions of communication systems can be explored. This Special Issue will delve into both supervised and unsupervised machine learning approaches for different aspects of this field. Various machine learning approaches for estimation, recognition and optimization are discussed.

Keywords

- semi-supervised machine learning
- unsupervised machine learning
- machine learning
- resource allocation
- physical layer security
- wireless communication
- 6G or beyond 5G

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Electronics is a multidisciplinary journal designed to appeal to a diverse audience of research scientists, practitioners, and developers in academia and industry. The journal is devoted to fast publication of latest technological breakthroughs, cutting-edge developments, and timely reviews of current and emerging technologies related to the broad field of electronics. Experimental and theoretical results are published as regular peer-reviewed articles or as articles within Special Issues guestedited by leading experts in selected topics of interest.

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