Special Issue

Advancements in Deep Learning and Deep Federated Learning Models

Message from the Guest Editors

With the advancements in multimedia technologies, artificial-intelligence-based imaging applications have gained significant attention from computational researchers. However, deep learning techniques still suffer from issues associated with over-fitting, data leakage, and hyper-parameters tuning. To overcome the problem of over-fitting, many researchers have utilized ensemble and federated (collaborative) learning techniques. However, federated learning suffers from the location privacy of the participants. Therefore, some researchers have utilized homomorphic encryption and blockchain techniques to provide security to the participants of federated learning models. Additionally, some researchers have utilized metaheuristic techniques to optimize the hyper-parameters of the deep learning and federated learning models. However, the selection of hyper-parameters is still an open area of research. Therefore, this Special Issue deals with those techniques that utilize imaging datasets to build artificial intelligence models. Advancements in deep learning and deep federated learning models will also be considered.

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About the Journal

Message from the Editor-in-Chief

Big Data and Cognitive Computing (BDCC) is a scholarly online journal which provides a platform for big data theories with emerging technologies on smart clouds and exploring supercomputers with new cognitive applications. It is a peer-reviewed, open access journal that publishes high quality original articles, reviews and short communications. The primary aims of this journal are to encourage contributions of high quality scientific papers relating to data management and analytics in industry, such as manufacturing, healthcare, education, media and business, data mining, and cognitive science. There is no restriction on the maximum length of the papers.

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