# **Special Issue**

# Predictive Performance-Explainability Duality for Big Data Analytics-Powered Healthcare

Message from the Guest Editors

This Special Issue seeks to attract high-quality manuscripts that demonstrate and validate novel contributions to human-interpretable, principled, and reliable predictive performance evaluation with appropriate statistical metrics and explainability, which are key to scale Al-driven applications leveraging Big Data in healthcare sustainably. In particular, this Special Issue builds upon the works of Parisi & Manaog (2023) involving innovative algorithms in machine learning and deep learning in healthcare, the MQAS quantitative assessment scale of papers on Al-driven applications in healthcare, and Chicco & Jurman (2023) on a further validation of the Matthews correlation coefficient (MCC) as a more robust performance evaluation metric for binary classification with imbalanced data, typical of real-life applications in healthcare, than the area under the receiver operating characteristic curve (ROC-AUC).

We are delighted to invite you to submit your highquality manuscript on any topics mentioned in the summary of our Special Issue entitled "Predictive Performance-Explainability Duality for Big Data Analytics-Powered Healthcare".

#### **Guest Editors**

Dr. Luca Parisi

Dr. Mansour Youseffi

Dr. Renfei Ma

**Deadline for manuscript submissions** 

closed (21 June 2024)



# Big Data and Cognitive Computing

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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.

#### Editor-in-Chief

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