Special Issue

Interactive Visual Analytics and Explainable AI for Big Data

Message from the Guest Editors

The benefits obtained from efficient and effective analysis methods for Big Data are not a prospect of the future anymore, but a reality. One of the research areas responsible for this is machine learning, whose techniques allow computers to learn complex patterns in large amounts of data. However, with great power also comes great complexity, which can hinder decision-making when analysts must understand the patterns—and their origins—before applying them. In this Special Issue, we focus on the role of information visualization, human-computer interaction, and interactive visual analytics in solving the challenge of Big Data with the use of complex machine learning techniques, while balancing potentially-contrasting requirements such as complexity and efficiency vs. explainability and/or interpretability. Recent advances in these research areas have shown that the investigation of datasets, algorithms, and models in coherent workflows, supported by visual analytics, can lead to the ultimate goals of obtaining impactful insights from large-scale data in a trustworthy and assessable way.

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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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