
PREFACE

This Special Issue is dedicated to the topic of Big Data and comprises a selection of papers presented at the Conference that took place at the University of Alicante in 2016, co-organised by the University Miguel Hernández and the Wessex Institute of Technology.

The importance of understanding how to handle huge volumes of information produced by the rise of IT and the rapid inclusion of the Internet and advanced communications in all fields of human endeavour cannot be over-estimated. This excess of information hinders the decision-making process necessitating the urgent development of Big Data technologies for the processing of information in diverse fields of application.

The current information overload requires the development of solutions to secure current data management from the perspective of Big Data. The data management process includes collection, integration, storage, pre-processing and analysis by Data Mining techniques and resulting in advanced techniques of representation and visualisation. The problem is particularly important in a variety of studies involving the better understanding of processes in nature.

The Journal is greatly influenced by the ideas of its late Honorary Editor, Professor Ilya Prigogine, whose pioneering work on the study of complex systems, particularly strongly interactive social–economic–natural ecosystems, continues to be developed further by the increasing availability of large databases.

The papers published in this issue will contribute to a better understanding of the complex process taking place in those systems. As a result, we feel it is most appropriate that the first paper presented here was written by the late Professor Sven Erik Jørgensen, a towering personality in the field of ecological models to whose memory this Issue is dedicated. Sven, whose Obituary appears at the end of this Issue, was awarded the first Prigogine Medal in 2014.

The Guest Editors
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