EDITORIAL
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The concept of Knowledge Society has been intensively studied since the last century. Its importance has been established from the fact that it represents a model, called Information Society, towards many scientists, political, and influential people believe our modern society is evolving.

Information is one of the main instruments of knowledge. It is composed by a set of organized data whose structure, processing, and transmission facilitate the communication, that is, to send and receive messages with a meaning. This creates knowledge, which has been a main key to the human development.

Digital technology has provided an excellent way to build reliable and very efficient information and communication systems. This efficiency depends strongly on adequate methods to classify, organize, store, distribute, process, transmit, and receive data.

This issue of Systems and Computers presents recent developments in the above fields. The papers included in this number compose a well-balanced set of methods and applications. These documents can be classified as follows: data storing and classification, data transmission via wireless networks, and applications to geographic information systems and image processing.

A. Rodríguez, D. Rosa, M. Mainegra, and L. González present a method to allocate fragments in a distributed database using a reinforcement-learning algorithm. The proposed method is flexible; it offers practical solutions and it can be applied to problems with some level of complexity.

In her doctoral dissertation, I. Ayaquica describes the conceptual clustering problem. She proposes two new conceptual algorithms based on seeds, and a quality function to evaluate them. She also introduces a fuzzy version of these algorithms and shows that, under some conditions, the proposed methods have a better performance than other reported elsewhere.

Wireless networks have shown many interesting advantages with respect to conventional ones. Their installation is easier, there is no wiring, they provide high mobility, and exhibit a better efficiency in many applications.

In the field of data transmission, R. Aquino, A. Block, and M. García describe a performance analysis of topological and geographical multicast routing algorithms for mobile wireless ad hoc networks. They propose two new routing protocols and establish which one is better for pedestrian and vehicular scenarios.

Wireless sensor networks are very useful in practice, but may generate a great amount of redundant information. In this issue, L. Palafox and A. Macías analyze the redundancy problem in wireless sensor networks. They propose a protocol for data dissemination in hierarchical clustered sensor networks that integrates security and reduces communication overhead by removing data redundancy. The functionality is evaluated by its application to a military monitoring problem.

This issue includes also two interesting applications to geographical information systems and image processing.

F. Sagols, J. Navarro, M. Ulloa, E. Hernández and M. López present the design of a geographical information system available via Internet, evolved from a previous program developed in 1996. This new system allows the insertion of documents in the maps, organized in layers and associated to specific coordinates. This is very useful to share documents related to a geographical application and as a communication channel linking several entities.

Finally, A. González, H. Sossa, E. Felipe, and O. Pogrebnyak propose an image retrieval algorithm based on the wavelet transform. The estimated coefficients are the input to a neural network, used to classify the images. This method is tested to characterize and classify images taken from commercial and war planes and small aircrafts, both in land and in air.

We really hope that this issue offers to the reader a sample of the present state of the information sciences, and help to promote collaboration between the different groups working in this important and interesting field.

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