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Editorial

The field of intelligent computing has developed and grown rapidly in the last twenty five years so that it in different areas of computing taking different forms and terminologies within different technologies. Recently, so many research areas in computer science and IT field prefer to solve their research problems using an intelligent approach by combining an appropriate method of AI with the area of research. Furthermore, there are so many “intelligent” functions that are embedded in the standard software that we use today either in a direct or indirect way.

Several recent systems showed to embody intelligence without being intelligent systems in the traditional sense. A good example is data mining techniques which can be implemented at various degrees of details in search engines. Other examples are the research fields of Web security, wireless networks, and digital watermarking in which one can find business intelligence techniques without necessarily adhering to one school of artificial intelligence or another. Instead, a hybrid approach is adopted and often assessed by the results as much as the theoretical basis.

For these reasons, the second issue contains 5 papers covering 5 different fields related to AI either directly or by adopting a hybrid approach. The first paper is about intelligent discovery of classification rules. The paper conducts a novel approach that discovers classification rules for data mining based on the technique of genetic algorithms.

The second paper concerns an intelligent approach for heterogeneous wireless networks. It presents and designs a multi criteria solution that considers an environment with co-existed WWAN, WMAN, and WLAN using a combined parallel fuzzy logic control and multi-criteria decision making system. The third paper is concerning Web security. It introduces a centralized, smart, and dynamic approach for protection against SQL injection attacks in Web applications.

The fourth paper is a case study and an application of data mining techniques in higher education environment. It is about discovering vital patterns from student data in University of Science and Technology, Yemen by applying two well-known techniques of data mining. The fifth paper, the end of this issue, introduces a copyright protection and fingerprinting scheme using digital watermarking.

Each one of the five papers included by this issue is related to intelligent computing and all of them have been published in well-know conferences such as INFOS'10, Cairo, Egypt and ICCAE'10, Singapore. Both of them are Sponsored and indexed by IEEE. Also, Some other papers of this issue have been published in ACIT'09 and ACIT'10 conferences. ACIT (International Arab Conference of IT) is a very well-known because it is the first IT conference in the Arab world. Technical committee of ACIT includes more than 300 referees around the world.

Dr. Ammar Zahary

Guest Editor

Editorial board member

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