Editor's Note

The International Journal of Interactive Multimedia and Artificial Intelligence provides an interdisciplinary forum in which scientists and professionals can share their research results and report new advances on Artificial Intelligence and Interactive Multimedia techniques.

This special issue, Teaching Mathematics using new and classic tools, concentrates on the practical and experimental teaching in advanced Mathematics in Engineering. The selected papers deal with the most relevant issues in the field, such as Mathematical learning and other different subjects in which Mathematics are needed, Advanced Mathematics, the development of different studied using Masive Open Online courser (MOOCs) or even the history of E-Learning and Mathematics. The result is a collection of experimental validations, mathematical papers and MOOCs studies which constitutes a clear contribution to the state of the art.

Teaching Mathematics is always hard since most of the students have the feeling that this field is not really applicable and not interesting at all. Although it is well known that Mathematics are present in almost all actions of life, as for exampe the design of a car or even shopping, it is complicated to make people understand this matter due to the fact that this Mathematics are camouflaged in the background. Moroever, there exists another problem: Student find Mathematics as a very tough subject, which is comupulsory, so many of the students have no motivation at all with the subject which constitutes another worry to teachers.

On the other hand, it is also known that one of the main benefits of using ICTs in a classroom is that teachers can motivate their students in almost every area and taking into account that, as previously remarked, this area is specially hard, we have to investigate all the possibilities that can make teaching easier. In this scene, E-Learning can be a very useful tool and we, as teachers, must get all the juice to it. The use of ICT and E-Learning have been increased exponentially in recent years both in school/college classrooms and University classrooms up to flood them with resources for a more meaningful learning in all areas of knowledgement.

In the last years, many authors are concerned with this problem and are putting all efforts in desgining new Websites related to Mathematics and their teaching (see [1]), investigating how math skills are acquired in different virtual environments (see [2]) or even developing different E-Learning environments which allow teachers evaluate their students in a compact and computerized way (see [3]). Therefore, many other authors have focused their studies in the field of teaching mathematics using E-Learning (see for example [3], [4] and [5]).

Over the past decade, the number of students that need specific mathematical courses is increasing every year leaded up to the requirement of developing different MOOCs which help students to understand better the basic concepts and can allow them to see different practical examples. Some authors have study this Mathematical MOOCS (see for example, [7], [8] and [9]).

Finally, the increasing number of research mathematicians has experienced an extraordinary growth and all the studies indicate that this trend will continue in the coming years. Some of this recent research is focused on developing new computer tools (see [10]) that can be used both as an aid to the investigation as in the classroom in order to explain advanced Mathematics.

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