Editorial

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There are many challenges to creating artificial intelligence systems. There are limited resources, insufficient knowledge in the field, feasibility, and many other technical problems on the way to creating AI. Artificial Intelligence currently remains a scientific field related to computer modeling of human intellectual functions. Artificial intelligence systems are generally used to refer to a computer system's ability to perform tasks that are intrinsic to human intelligence, such as logical inference and learning tasks. Any task whose solution algorithm is not known in advance or whose data are incomplete can be classified as an AI task. Systems, programs performing actions to solve a task can be classified as AI if their activity is similar to the result of a human in solving the same task. Therefore, a number of software means can be referred to as AI: text recognition systems, automated design, self-training programs, etc. But not only for this reason, but also because they operate on similar principles to humans. There are two main promising directions in AI research. The first is to bring AI systems closer to the principles of human thinking. The second is to create AI representing the integration of already developed AI systems into a single system capable of solving human problems.

As research and development in artificial intelligence is getting more mature and the results are deployed at scale in real-life contexts, the crucial role of using automated systems in e-education, as additional support for

stakeholders in decision-making processes, is becoming evident nowadays. Current research has considerably broadened our understanding of this artificial intelligence, but there has been less work on how it applies to online education. Applications in this field are still limited, although they promise to increase in the years to come. Besides, much research and many questions remain to be answered to bring together the technological, social, pedagogical and ethical perspectives in these intelligent systems.

This special issue addresses the use of intelligent systems for smart applications and the associated issues and challenges. The special issue is divided in 2 parts of which this is the first part consisting of 10 papers.

The 10 papers in this first part of the special issue are:

– Fuzzy based Predication Technique for Diabetics Association Analysis for Salem District Farmers
– A Bio-Inspired Particle Swarm Optimization for Improving Neural Based Diabetes Prediction System
– Data profiling and machine learning to identify influencers from social media platforms
– COVID-19 Impact Sentiment Analysis on a Topic-based Level
– Basic Activity Recognition from Wearable Sensors Using a Lightweight Deep Neural Network
– Semantic Web and Internet of Things: Challenges, Applications and Perspectives
– Simulation Daily Mobility in Rabat Region Using Multi-Agent Systems Models
– Bayesian Model Average for Student Learning Location
– Diabetes prediction using Machine Learning algorithms and ontology
– A Comparative Study Between Deep Learning Models for Sentence-Level Sentiment Classification Using a Large Corpus