Special issue of

The 2nd International Conference on Computer Science's Complex Systems and their

Applications (ICCSA'2021)

Content

Complex systems are made up of a large number of interconnected components. Many aspects of these systems, such as emergence, self-organization, nonlinearity, and adaptation, are derived from their mainly stochastic and non-trivial interactions. Furthermore, these systems are often used to describe various phenomena in domains such as biology, sociology, psychology, and economics. Complex Systems is a trans-disciplinary research area that builds on statistical physics, computer science, data science, and applied mathematics.

In the context of complex systems, the computer science mission could be summarized into two primary missions. The first is offering adequate modeling and simulation tools for such systems. The second is that many computer systems nowadays may be considered complex systems. Indeed, today's computer systems are made up of many interconnected components from which complex system characteristics might arise.

On this basis, the primary goal of the second international conference on computer science's complex systems and their applications (ICCSA'2021), which was held on May 25th and 26th, 2021, at the University of Oum El Bouaghi (Algeria) by the research laboratory on computer science's complex systems $(ReLa(CS)^2)$, is to study these systems. It brings together academics, industry experts, and educational leaders worldwide to talk about a wide range of topics, including computer security, computer networks, embedded systems, image and video processing, modeling and simulation, and intelligent distributed systems, to name a few. Moreover, after the first edition's success (ICCSA'2016), this second edition has the primary task of consolidating its status as a meeting spot for researchers and practitioners in the area. As a result, a rigorous double-blind review procedure is used, with each publication being examined by at least two experts. Also, we chose to have a restricted acceptance rate (about 22%) to achieve optimal selectivity.

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