Complexity

Special Issue on
Analysis and Simulations of Complex Digital Ecosystems: Recent Trends and Advances

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CALL FOR PAPERS

Modern digital infrastructures have supported the construction of complex, sociotechnical systems on which humans, processes, and things are mutually interconnected. The study of such ecosystems, which influence everyday life, has assumed crucial importance for companies and institutions that want to understand new trends in human behaviour and how digital technologies have an influence on it.

Agent-based simulation, data mining, and modeling tools for complex networks, along with billions of digital mobile things that collect data, enable researchers to explore how these complex ecosystems emerge and evolve. Nevertheless, studying the complexity of these ecosystems leads to new challenges for researchers, particularly in the information systems field.

Given the premises above, the main focus of this special issue is to present recent, original studies on the emergent dynamics in social and digital complex ecosystems, as well as novel techniques aimed at studying their emergent properties. Authors are invited to present also algorithms, frameworks, software architectures, and simulation tools aimed at bringing about new information system theories concerning complexity in modern digital ecosystems. Furthermore, we encourage studies aimed at analyzing new trends in online social network platforms, with particular emphasis on the impact of ubiquity of modern devices.

Potential topics include but are not limited to the following:

- ▶ Big data analytics and data mining for predictive modeling of digital ecosystems
- ▶ Simulation techniques, tools, and algorithms for global large-scale digital ecosystems
- ▶ Agent-based modeling and simulations of global digital ecosystems
- ▶ Frameworks and middleware for building heterogeneous digital ecosystems
- ▶ Impact of devices ubiquity on online social network platforms

Authors can submit their manuscripts through the Manuscript Tracking System at http://mts.hindawi.com/submit/journals/complexity/ascd/.

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