Creativity is the process of breaking out of established patterns; it is the reorganization, recombination, or reinterpretation, of concepts and, ideas for getting something unique and previously unknown. Creating software is one of the most creative activities that humans undertake. It is developed for people and by people and people’s creativity can be a good source to improvise solutions to problems for dominating complex systems such as software design and development.

This book includes the proceedings of the Second Conference on Creativity in Intelligent Technologies and Data Science 2017, which continues the previous one, CIT&DS 2015. The new conference has three main groups of topics. The first one is called “Artificial intelligence and Deep Learning Technologies for Creative Tasks.” This chapter includes papers related to the following topics: (a) Knowledge Discovery in Patent and Open Sources; (b) Open Science Semantic Technologies; and (c) Computer Vision and Knowledge-Based Control. The second chapter unites articles in the framework of “Cyber-Physical Systems and Big Data-Driven World.” In particular, findings related to the following are highlighted: (a) Pro-Active Modeling in Intelligent Decision-Making Support, (b) Design Creativity in CASE/CAI/CAD/PDM, (c) Intelligent Internet of Services and Internet of Things. The last chapter is titled “Intelligent Technologies in Social Engineering” and contains contributions on the topics: (a) Data Science in Social Networks Analysis; (b) Creativity and Game-Based Learning; and (c) Intelligent Assistive Technologies: Software Design and Application.

The main objective of the CIT&DS 2017 was to bring together researchers and practitioners to share ideas in using creativity to theory and practice in software engineering.

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