Special Issue

Recent Progress of Information Security and Cryptography

Message from the Guest Editor

Recent advances in quantum computing has led to the consideration of alternatives for most techniques and cryptographic algorithms used in cybersecurity and, particularly, in information security; this is largely due to the application of quantum techniques, based mainly on Shor's factorization algorithm which challenges the standards of public key cryptosystems and digital signatures. However, many other cryptographic techniques are used in different ambits, such as confidential group communications, distributed computing, blockchain, or steganography, which could adapt to new security requirements. The aim of this Special Issue is to explore the recent solutions in the community that can overcome menace-derived attacks based on quantum computing. These emerging methods can be derived from chaos theory, fractal geometry, metaheuristic methods, genetic algorithms, artificial intelligence, or new algebraic applications such as those related to problems that appear to be quantum-resistant, such as those recommended by NIST, including hash-based cryptography, code-based cryptography, and lattice-based cryptography.

Guest Editor

Prof. Dr. Juan Antonio López Ramos
Department of Mathematics, University of Almería, 04120 Almería, Spain

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Applied Sciences
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
applsci@mdpi.com

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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo
Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, Italy

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