

## Special Issue on **Computational Intelligence in Emerging Solutions for Multimedia Security**

# CALL FOR PAPERS

The end of the 20<sup>th</sup> century was marked by an extraordinary technical revolution ranging from analog to numerical. An enormous amount of media in the form of text, audio, speech, music, image, and video is appearing in the networks field; meanwhile, there is an increasing trend in multimedia distributed computing, multimedia databases, and multimedia communications. However, the advantages of this revolution were not achieved without drawbacks, such as illegal copying and distribution of multimedia documents. As a consequence, the subject of multimedia security has attracted intensive research activities.

Developments in computational intelligence provide promising opportunities for multimedia security. Recently, computational intelligence methods have been employed on various aspects of multimedia security such as multimedia encryption, digital watermarking, steganalysis, and hashing multimedia. The purpose of this special issue is to explore the possibilities of applying the following aspects (not limited to the given topics) of computational intelligence to multimedia security: evolutionary computation, neural networks, fuzzy Logic, and learning theory.

The aim of this feature topic is to bring together the research accomplishments of academics, practitioners, and researchers in the area of computational intelligence and multimedia security. We encourage prospective authors to contribute with their work to extend the existing knowledge in the field. Original manuscripts are being sought to present new research results on the theory, algorithms, methods, and practice on relevant topics. The special issue seeks original contributions on usage of the abovementioned technologies of computational intelligence for multimedia security.

Potential topics include but are not limited to the following:

- ▶ Metaheuristic optimization techniques used for multimedia security (encryption, watermarking, fingerprinting, hashing, etc.)
- ▶ Mathematical models for multimedia security (encryption, watermarking, fingerprinting, hashing, etc.)
- ▶ Emerging solutions based on chaotic theory for multimedia encryption
- ▶ Cryptanalysis and steganalysis based on mathematical issue
- ▶ Multimedia manipulation and multimedia forensics
- ▶ Emerging technologies in multimedia security

Authors can submit their manuscripts through the Manuscript Tracking System at <https://mts.hindawi.com/submit/journals/mpe/weoe/>.

Papers are published upon acceptance, regardless of the Special Issue publication date.

### **Lead Guest Editor**

George Giakos, Manhattan College,  
New York, USA  
[george.giakos@manhattan.edu](mailto:george.giakos@manhattan.edu)

### **Guest Editors**

Khaled Loukhaoukha, Laval University,  
Quebec, Canada  
[khaled.loukhaoukha.1@ulaval.ca](mailto:khaled.loukhaoukha.1@ulaval.ca)

Ahmed Refaey, Manhattan College,  
New York, USA  
[ahusse7@uwo.ca](mailto:ahusse7@uwo.ca)

Khalil Zebbiche, Development Research  
Center, Algiers, Algeria  
[kzebbiche01@qub.ac.uk](mailto:kzebbiche01@qub.ac.uk)

Sameh Sorour, University of Idaho,  
Idaho, USA  
[samehsorour@gmail.com](mailto:samehsorour@gmail.com)

Mohamed F. Feteiha, City of Scientific  
Research and Technological  
Applications, Alexandria, Egypt  
[mffeteih@gmail.uwaterloo.ca](mailto:mffeteih@gmail.uwaterloo.ca)

### **Submission Deadline**

Friday, 1 December 2017

### **Publication Date**

April 2018