Overview:

In recent years we can observe how new advanced computing technologies, and computational approaches are successfully used in many application areas like VR/AR and multimedia technologies, decision making and information retrieval solutions, pattern classification, and security systems. The big progress in application of intelligent information processing techniques is possible thanks to the development of new computing approaches and techniques oriented on using of innovative models for information processing or cognitive computing, which is based on human thinking models and perceptual abilities (bio-inspired computation etc.). Such human-oriented information processing methods allow to intelligently analyze a great amount of data (multimedia, Cloud, classified etc.), store them, manage in secure manner, and transmit over communication networks. Further development of such technologies will depend on future computing approaches for information fusion, understanding, reasoning and encryption of analyzed data.

These subjects, as well as a number of others, connected with advanced information processing and securing methodologies, for pervasive computing, IoT, smart infrastructure, 5G communication networks, VR/AR technologies, will form the subject of a Special Issue on “Advanced approaches for information processing in multimedia, decision making and security systems” in the Concurrency and Computation: Practice and Experience Journal.

Topics

Topics of interest include, but are not limited to, the following:

- Behavioral and perceptual models for data analysis and management
- Bio-inspired approaches for information processing and understanding
- New computational models for security and cryptography
- Application of cognitive information systems
- Innovative decision making approaches
- Secure data and services management
- Human oriented protocols
- Visual pattern analysis and application
- Steganography and authentication
- Information retrieval and decision support systems
- Computational intelligence and telecommunications
- VR/AR, and multimedia systems
Important Dates:

- Manuscript submission deadline: July 1, 2019
- Notification of acceptance: September 1, 2019
- Submission of final revised paper: November 1, 2019
- Publication of special issue (tentative): 2020

Papers targeted

Quality of papers and relevance to the special volume's topic are the most important criteria for accepting contributions. Each selected paper must be a new contribution, or extended by more than 50% of its content upon first submission.

Each paper submitted for this Special Issue will go through peer-review process by at least two reviewers.

Manuscripts must follow these guidelines:

- Submissions must be prepared for publication according to the journal submission guidelines: http://www.cc-pe.net/journalinfo/authors.html#guidelines

Guest Editor:

- **Prof. Marek R. Ogiela**, AGH University of Science and Technology, Cryptography and Cognitive Informatics Research Group, Krakow, Poland, mogiela@agh.edu.pl, http://home.agh.edu.pl/~mogiela/