Call for Papers for

Special Issue on Interactive Multimedia in 5G Communications

Multimedia Tools and Applications- Springer

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Multimedia consists of a variety media combination such as text, audio, graphics, images, animation, video and interactive content, etc. It is the field concerned with the computer controlled integration of text, graphics, still and moving images or motion video, animation, sounds, and any other mediums. It is a rapidly evolving area with growing applications including a part of economy as diverse as entertainment, broadcasting, education and professional training, publishing, and computer industry, as well as data and information communication. Multimedia services are the major emerging applications in the area of Cloud Computing, Internet of Things based on Information and Communication Technologies. With the development of mobile communication technology and the converged network and Internet technology, the real-time, interactive, personalized and location-aware mobile Internet, and Web based technology is being applied to Internet. Above all, the content-rich multimedia streaming data is producing the new attractive services in the mobile internet with the evolution of communication ability, computing power and memory size of mobile devices. The growing content resources demand of mobile applications in the multimedia streaming service makes mobile communication technology need to support increasingly data transfer rates. Presently the growth of multimedia application service over the Internet is rapidly increasing on digital mobile communication. The emergence of new technologies ensures that non-voice communications are to dominate the mobile communications usage. The mobile communication system such as third-generation (3G), fourth-generation (4G), and LTE are characterized by higher data rate services and are expected to provide high flexibility in the introduction of new services, high spectrum efficiency compared to earlier systems, full coverage and mobility at 5Mbps and limited coverage and mobility at about 270 Mbps. Recently, Fifth-generation (5G) was introduced. In a joint 5G trial, SKT and Nokia Networks achieved 19.1 Gbps transmission speed over the air. In this communication, for example, enable a user to download a full-HD movie in a matter of seconds. At the point of 3G, 4G and 5G rests a fundamental shift away from voice to mainly mobile multimedia communication. The evolution of mobile communication has started an overall process towards convergence and interoperability of current communication systems to be available the transfer of huge multimedia information in high speed bandwidth. And all IP based solution of converged network is the unifying protocol between terminal devices and networks that provides a solution by merging new technology. The change of high speed communication technology on this wise allows access to huge volume of multimedia information. These services are at new services of multimedia applications related to all aspects of life, spanning the business, personal, leisure, industrial, and educational sectors, etc. based on Cloud Computing, M2M, and IoT environment. Thus, new multimedia application services come to be increasingly more popular like broadband Internet access.

This special issue will focus on major trends and challenges in this area, and will present work aimed to identify the researches for comprehensive and interactive multimedia applications and services with 5G.

The topics of interest for this special issue include, but are not limited to:

- Mobile entertainment system and service on 5G
- Mobile multimedia broadcasting service and application
- Multimedia cloud computing service on 5G
- M2M (Machine-to-Machine) for multimedia technology on 5G
- Multimedia data communication for 5G
- Advanced mobile multimedia application and service
- Multimedia resources in the cloud computing
- Multimedia networking and QoS on 5G communication
- Mobile audio/video streaming on 5G
- Peer-to-peer media systems and services on 5G
- Sensor networks on 5G
- Video teleconferencing on 5G
- Information visualization and interactive systems
- Tools for media authoring, editing, browsing, and navigation with high speed communication
- Signal processing including audio, video, image processing, and coding
- Media meta-modeling techniques
- Storage systems, databases, and retrieval for multimedia
- Image, audio, video, genre clustering & classification
- Video summarization and story generation
- Mosaic, video panorama and background generation
- 3D and depth information
- Mobile and location-based media techniques on 5G
- Social network services for mobile users
Paper Submission
Authors are encouraged to submit high-quality, original work that has neither appeared in, nor is under consideration by, other journals. Springer offers authors, editors and reviewers of Multimedia Tools and Applications journal a web-enabled online manuscript submission and review system. Our online system offers authors the ability to track the review process of their manuscript. Manuscripts should be submitted to: http://www.editorialmanager.com/ntap. This online system offers easy and straightforward log-in and submission procedures, and supports a wide range of submission file formats. Please login the submission system, enter the "Select Article Type" menu, and then select item of "1070 - Interactive Multimedia in 5G Communications. All papers will be peer-reviewed following the Multimedia Tools and Applications reviewing procedures. Authors should prepare their manuscripts according to the online submission page of Multimedia Tools and Applications at http://www.springer.com/11042

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