
Special session on Optimization Methods in Multimedia Systems: Algorithms, Approaches and Applications

The 8th International Conference on Advanced Machine Learning and Technologies
and Applications (AMLTA2022)

AIM & SCOPE

Indisputably communication is becoming multidimensional, adaptive, ambient, and reliable. With the onset of 5G connectivity, not only men but also machines get integrated to visualize and realize next-generation context-aware and people-centric services. And the more, the number of dimensions involved in a communication setup, the richer it is, and the more decisive and deeper impacts, it brings in. With ultra-low latency and high network capacity, besides obsessed with multimedia and multimodal systems, we are all set to experience virtual, augmented and mixed reality (VR/AR/MR) applications. We increasingly leverage sound, color, action, gesture, tone, texture, and a wider variety of emotions in understanding what others express, and how our everyday environment is communicating to us, and how we interact with others in the vicinity. Even when confined to media that places severe limits to the number of dimensions available, we tend to innovate, by adding virtual dimensions. Dealing with data from different modalities, is the common case in today's systems. With the continuous development in network technologies, input/output (I/O) systems, and greater computational power, creating and sharing multimedia data is becoming easier for all people around the world. For an example, in Facebook, there are objective views, comments, well-intended opinions, cryptic posts, static images, voice messages, and video clips, etc. Storing, searching in, analyzing, and utilizing multimedia data is highly challenging. Massive amount of multi-structured data is being generated, stocked and subjected to a variety of investigations. To be able to deal with this poly-structured data from diversified sources in order to extract useful information and insights in time, we need knowledge discovery and dissemination technologies.

That is why this issue gives the opportunity for researchers and practitioners to present their efforts in addressing the challenges of dealing with multimodal and multimedia data.

This issue will provide the research students, scholars and scientists with opportunities to discuss and explore areas related to the multimedia engineering, science, analytics, and management.

List of probable paper titles.

Intelligent Image / Video Analytics

Digital Image and Video Processing

Image Rendering and Quality

Imaging Sensors and Acquisition Systems

Content Based Image/Video Retrieval

Vision for Graphics

Human Behavior Understanding

Deep Artificial Intelligence

Motion and Tracking Algorithms and Applications

Watermarking Methods and Protection

Image Data Structures and Databases

Color Reproduction

Image Compression, Coding, and Encryption

Statistical and Structural Pattern Recognition

Performance Analysis and Evaluation

Novel Image Processing Applications

Machine Learning Technologies for Vision

Multimedia in Bioinformatics

Virtual Reality and Simulations

Augmented Reality Image Processing

Computational and Architectural Aspects of Human Vision

Innovative Multimedia Systems or Devices

Internet / Mobile Multimedia Sharing

Intelligent e-Health based on Multimedia Analysis

Games and Gamification

Vision and Languages

Edge Computing

Edge AI Systems

Organizers:

Professor Ashraf Darwish Helwan University, faculty of science, Egypt

Swarn Avinash Kumar , Research Engineer at the self-driving division of Lyft.,USA

Abhishek Kumar, Senior IEEE Member, Chitkara University, PUNJAB, INDIA

For further information, please contact

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Important Dates

Paper submission deadline	30 Nov. 2021
Acceptance notification	30 December 2021
Submission of revised papers and camera ready	10 January 2022
Registration	10 January2022

Paper Submission & Publication

Authors are invited to submit original research contributions not concurrently submitted elsewhere (Submission system). Normal length papers should be 8-10 pages, formatted in [Springer's single column format](#) (detailed instructions for paper format in Latex and MS Word can found here <https://www.springer.com/series/11156#>).

Submitted papers will be refereed by at least three reviewers for quality, correctness, originality,

and relevance. Notification and reviews will be communicated via email. Authors of the best papers will be invited to extend their papers for inclusion in a special issue of the some journals indexed by SCOUPS .

Web Submission:

<https://ocs.springer.com/misc/conference/submitpaperto/AMLT2022>

All accepted conference papers will be presented at the conference and included in in the conference proceeding which will be published by Springer (Pending) in the series of "Lecture Notes in Networks and Systems, Springer" and abstracted/indexed in DBLP, Google Scholar, Mathematical Reviews, SCImago, Scopus.