

Call for Papers

IEEE International Conference on Multimedia Information Processing and Retrieval (MIPR, ieee-mipr.org)

April 10-12, 2018, Miami, FL, USA

New forms of multimedia data (such as text, numbers, tags, networking, signals, geo-tagged information, graphs/relationships, 3D/VR/AR and sensor data, etc.) has emerged in many applications in addition to traditional multimedia data (image, video, audio). Multimedia has become the “biggest of big data” as the foundation of today’s data-driven discoveries. Almost all disciplines of science and engineering, as well as social sciences, involve multimedia data in some forms, such as recording experiments, driverless cars, unmanned aerial vehicles, smart communities, biomedical instruments, security surveillance. Some recent events demonstrate the power of real-time broadcast of unfolding events on social networks. Multimedia data is not just big in volume, but also multi-modal and mostly unstructured. Storing, indexing, searching, integrating, and recognizing from the vast amounts of data create unprecedented challenges. Even though significant progress has been made processing multimedia data, today’s solutions are inadequate handling data from millions of sources simultaneously. The first IEEE International Conference on Multimedia Information Processing and Retrieval (IEEE-MIPR) will take place in Miami, Florida, USA on April 10-12, 2018. The conference will provide a forum for original research contributions and practical system design, implementation, and applications of multimedia information processing and retrieval for single modality or multiple modalities. The target audiences will be university researchers, scientists, industry practitioners, software engineers, and graduate students who need to become acquainted with technologies for big data analytics, machine intelligence, information fusion in multimedia information processing and retrieval. A collection of keynotes, open panels, and workshops will be held, together with paper/poster sessions.

The conference will accept regular papers (6 pages), short papers (4 pages), and demo papers (2 pages). Authors are encouraged to compare their approaches, qualitatively or quantitatively, with existing work and explain the strength and weakness of the new approaches. In addition, a special track encourages “wild and crazy ideas” (4 pages). Selected submissions will be invited to submit to journal special issues.

The conference includes (but not limited) the following topics of multimedia data processing and retrieval.

Retrieval

- Multimedia Search and Recommendation
- Web-Scale Retrieval
- Relevance Feedback, Active/Transfer Learning
- 3D and sensor data retrieval
- Multimodal Media (images, videos, texts, graph/relationship) Retrieval
- High-Level Semantic Multimedia Features

Machine Learning/Deep Learning/Data Mining

- Deep Learning in Multimedia Data and / or Multimodal Fusion
- Deep Cross-Learning for Novel Features and Feature Selection
- High-Performance Deep Learning (Theories and Infrastructures)
- Spatio-Temporal Data Mining

Content Understanding and Analytics

- Multimodal/Multisensor Integration and Analysis
- Effective and Scalable Solution for Big Data Integration
- Affective and Perceptual Multimedia
- Multimedia/Multimodal Interaction Interfaces with humans

Multimedia and Vision

- Multimedia Telepresence and Virtual/Augmented/Mixed Reality
- Visual Concept Detection
- Object Detection and Tracking
- 3D Modeling, Reconstruction, and Interactive Applications

Networking for Multimedia Systems

- Internet Scale System Design
- Information Coding for Content Delivery

Systems and Infrastructures:

- Multimedia Systems and Middleware
- Telepresence and Virtual/Augmented/Mixed Reality
- Software Infrastructure for Data Analytics
- Distributed Multimedia Systems and Cloud Computing

Data Management

- Multimedia Data Collections, Modeling, Indexing, or Storage
- Data Integrity, Security, Protection, Privacy
- Standards and Policies for Data Management

Novel Applications:

- Multimedia Forensics and Security
- Urban planning and emergency responses
- Environmental monitoring
- Education (using Multimedia for Education or Education about Multimedia)

Internet of Multimedia Things

- Real-Time Data Processing
- Autonomous Systems such as Driverless Cars, Robots, and Drones
- Mobile and Wearable Multimedia

Paper Submission: Please follow the instructions on http://ieee-mipr.org/submit_instruction.html.

Important Dates:

Workshop and Special Session Proposals: September 30, 2017

Notification of Workshop and Special Session Proposal Acceptance: October 20, 2017

Regular (6 pages) and Short Paper (4 pages) Submission: October 1, 2017

Notification of Acceptance: November 20, 2017

Wild and Crazy Idea (4 pages) and Demo Paper (2 pages) Submission: November 30, 2017

Notification of Wild and Crazy Idea and Demo Paper Acceptance: January 10, 2018

Camera Ready and Author Registration: January 20, 2018

General Co-Chairs:

Shu-Ching Chen, Florida International University, USA

Mei-Ling Shyu, University of Miami, USA

Program Co-Chairs:

Mohan Kankanhalli, National University of Singapore, Singapore

Yung-Hsiang Lu, Purdue University, USA

Katarzyna Wac, University of Copenhagen, Denmark

Chengcui Zhang, The University of Alabama at Birmingham, USA