Special Session on Deep Learning models in Image and Video Analytics in conjunction with 13th World Congress on Information and Communication Technologies WICT '23

December 14-15, 2023

Website: http://www.mirlabs.org/wict23

Onsite Venues: http://www.mirlabs.org/wict23/venue2.php

Objectives and Scope

Deep learning uses neural networks to learn useful representations of features directly from data. It is extremely beneficial to data scientists who are tasked with collecting, analyzing and interpreting large amounts of image and video data. It may use pretrained neural networks to perform image enhancement, restoration, encoding and compression.

Deep learning models recognize specific actions in a video sequence or real-time video streams. Video intelligence solution can enable end users to accelerate investigations by searching and filtering video based on specific criteria; attain situational awareness by configuring rule-based alerts based on video objects and behaviors; and derive operational intelligence by visualizing the video data into dashboards and heatmaps for evaluating trends. Video content analysis delivers both qualitative and quantitative results.

Subtopics

This special session invites eminent papers focusing on the following deep learning models for image and video analysis but not limited to

- Convolutional Neural Networks (CNNs)
- Long Short-Term Memory Networks (LSTMs)
- Recurrent Neural Networks (RNNs)
- Generative Adversarial Networks (GANs)
- Radial Basis Function Networks (RBFNs)
- Multilayer Perceptrons (MLPs)
- Self Organizing Maps (SOMs)
- Deep Belief Networks (DBNs)

- Sparse models
- Image Augmentation / Segmentation
- Feature selection and Extraction
- Classification and Regression
- Object detection and recognition
- Video processing
- Object movement and monitoring etc

Paper publications

- Proceedings will be published in Lecture Notes in Networks and Systems, Springer (https://www.springer.com/series/15179)
- Indexed in SCOPUS, INSPEC, WTI Frankfurt eG, zbMATH, SCImago
- Papers maximum length is 10 pages.
- Papers must be formatted according to Springer format (Latex/word) available at: <u>https://www.springer.com/de/authors-editors/book-authors-editors/manuscript-</u> <u>preparation/5636#c3324</u>
- Submission Link: <u>https://cmt3.research.microsoft.com/WICT2023</u>

Important Dates

Paper submission due: September 30, 2023

Notification of paper acceptance: October 31, 2023

Registration and Final manuscript due: **November 15, 2023**

Conference: December 14-15, 2023

Special Session Chairs

- 1. Dr. R. Devi Priya, KPR Institute of Engineering and Technology, Coimbatore, India
- 2. **Dr. T. Rajasekaran**, KPR Institute of Engineering and Technology, Coimbatore, India
- 3. Dr. D. Vanathi, Nandha Engineering College, Erode, India

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