

## Call for Papers

### Special Session On

#### **“Recent advances and challenges in face recognition”**

Face recognition has become an integral part of modern surveillance systems due to increase in the unlawful and terrorist activities across the globe. Along with face recognition, activity detection of a person has also been equally important to alert the concerned authorities immediately to reduce the catastrophe in case of unwanted or suspicious actions. This can help the authorities to keep an eye on every action and person which in turn helps in enhancing the security and reducing the losses and damaged caused. To achieve more precise face recognition, today the requirement is to develop the algorithms which are invariant to all the unusual conditions and challenges that are encountered in surveillance. These prominently observed challenges to face recognition and surveillance algorithms are changes in illumination conditions, increase in age, variations in the surveillance image/video resolutions, changes in the expressions and emotions, variation in the pose, etc.

Due to increasing availability of camera systems, high computational resources, and rapid progress of Artificial Intelligence (AI) techniques, a lot of research is being carried out in this area. Prospective authors are invited to submit their original research work that deals with theory, methods, systems and applications of face recognition and surveillance. The topics of interest for this session can include, but not limited to:

- Face as a Biometrics.
- Face recognition under pose invariance, age invariance, illumination invariance, scale invariance, rotation invariance, expressions and emotion invariance.
- Characterization of face recognition systems.
- IoT in face recognition and tracking.
- Predictive models for face and expression monitoring.
- Deep learning for face recognition.
- Hybridization of multiple face recognition techniques.
- Real time face recognition.

- Face recognition in videos.
- AI in face recognition.
- Applications of face recognition.
- Face recognition and tracking in wide area surveillance.
- Mood analysis using face recognition.
- Healthcare Expert Systems employing face recognition: face analysis for health care.
- Patient identification and record tracking.
- Human Face in Human-Computer Interface.
- Methods of Pattern Recognition for face classifications.
- Low-resolution face recognition and its challenges.
- Tiny face recognition.
- Multi-camera face recognition systems.
- 3D face reconstruction and recognition.
- Applications of Data Mining and Knowledge Discovery for face recognition.
- Risk Assessment, Trust, Ethics, Privacy and Security of face databases.
- Knowledge Management and Representation for huge face Data bases of face recognition systems.
- Ethical and privacy issues of face recognition.

**Paper Submission Format:**

Authors are requested to submit full papers in English (Maximum 6 pages, double-column US letter size) as PDF using the IEEE templates. The IEEE paper template can be downloaded from the link given below.  
[http://www.ieee.org/conferences\\_events/conferences/publishing/templates.html](http://www.ieee.org/conferences_events/conferences/publishing/templates.html).

The submission is to be done through the TENCON website [www.tencon2019.org](http://www.tencon2019.org). All the accepted and presented papers will be submitted to IEEE Xplore® digital library for publication.

**Important Dates:**

Paper Submission Deadline: **June 30, 2019**

Paper Acceptance Date: **August 15, 2019**

Camera-Ready Submission: **August 30, 2019**

**Special Session Chairs:**

**Dr. Vishal R. Satpute**

**Dr. Saugata Sinha**

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