

22-24 January 2019, Madrid, Spain



SEAHF 2019

1st International Conference on Smart Innovation,
Ergonomics and Applied Human Factors

*Special Session
Organizers :*

*Mr. Ramzi GUETARI,
ISI, Tunis El Manar
University*

*Mme. Nawres KHLIFA,
ISTMT, Tunis El Manar
University*

Call for Special Session Papers

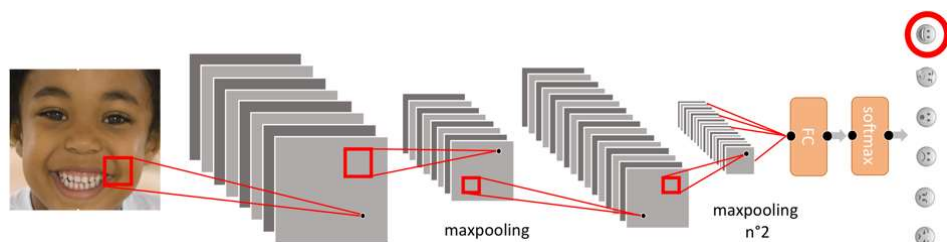
Emotion Recognition for the development of Human-Machine Interfaces

ramzi.guetari@isi.utm.tn, nawres.khlifa@istmt.utm.tn

Emotions brighten up our lives and allow to express the different facets of our personalities. An emotion is a reaction to a stimulus that could affective, environmental or psychological. It is felt according to a given situation that is specific to each individual. Providing the computer with emotional state recognition capabilities is the scientific challenge around which different communities come together (signal processing, image processing, artificial intelligence, robotics, human-machine interaction, etc.).

Emotion recognition is a difficult task as it relies on the prediction of abstract emotional states from multimodal input data. These modalities include video, audio and physiological signals. The visual modality is one of the most informative channels and especially facial expressions that are a very strong indicator of the emotional state of an individual. Facial-based emotion recognition systems analyze the deformations of certain facial features such as the eyes, the eyebrows, and the mouth. The ability to recognize facial expressions serves in a plethora of areas and especially in human-machine interaction and many other areas. Many techniques have been used in the recognition of facial expressions and emotions. In recent years, it is mainly the deep neural networks that have dominated this research field.

The purpose of this special session is to bring together researchers working in the field of automatic emotion recognition to present and discuss the latest advances in this field of research in terms of models, architectures or methods of resolution. Theoretical contributions and case studies of real applications are welcome.



The session will seek original work on the following aspects but not limited to:

- New algorithms of Image processing for the automatic recognition of emotions
- Deep learning and automatic recognition of emotions
- Recognition of the emotions contained in the soundtracks
- Face Analysis in Computer Vision
- Emotion Recognition in : Robotics, Industries, Security, Medical Engineering

IMPORTANT DATES

Paper Submission: November 15, 2018

Notification of acceptance: November 30, 2018

Final Decision: December 13, 2018