



Call for Papers - FBE2020

Workshop on Facial and Body Expressions, micro-expressions and behavior recognition

January 10th, 2021 - Milan, Italy

The workshop will be held in conjunction with ICPR2020: The 25th International Conference on Pattern Recognition, Milan, Italy, January 10-15, 2021.

Website: <https://micc.unifi.it/FBE2020/>

Submission deadline: October 10th, 2020

Submission server: <https://cmt3.research.microsoft.com/FBE2020>

=== CALL FOR PAPERS ===

In recent years there has been an increasing interest in several fields of research for analyzing human behaviour. Typically these works focus on macro-level recognition such as activities or explicit human-human interactions. Systems built to address these tasks assume that what is recognized corresponds to the true intentions of the observed person. This may not be always the case, since macro-level behaviors can be easily counterfeited.

For this reason, the interest in understanding micro-level behaviors has emerged, since these are often connected to involuntary reactions which are less likely to be faked or concealed. Understanding strong, unbiased behaviors is also a key aspect in several fields. For example, in security critical applications, observing posture, gait and small body movements could reveal malicious intentions. Moreover, body movements and behaviors could also be used to profile or re-identify subjects without harming their privacy. In general, low-level expressions and behaviors are more difficult to recognise than high-level ones, due to the fine-grained nature of the problem. It is also a fact that with the recent technological advancement, the means of data acquisition and processing have also

dramatically improved, enabling new applications and analyses. To reliably understand facial micro-expressions, for example, there are both spatial and temporal issues to take into account. On the one hand it is necessary to either acquire and process high-resolution images or rely on different kinds of data such as high-quality depth maps. On the other hand, micro-expressions occur over an extremely short timespan (<500ms) and might not even be detectable with conventional low-framerate cameras. If some years ago it was not possible to acquire these kinds of data and process them, now it certainly is.

=== SCOPE ===

In this workshop we are interested in submissions focused but not limited on low-level characteristics, either facial or related to the human body, aiming at understanding high-level concepts. We are also interested in applications leveraging this information, for user profiling or behavior understanding. The workshop also favours positive criticism of current works and encourages new perspectives on the matter. Moreover, as we are all living in a world where our personal data is used and often abused, we are also interested in privacy issues that arise when profiling users. Finally, we also promote the creation of new datasets for both facial micro-expressions and body behavior understanding. Submissions are invited from all areas of pattern recognition.

Topics of interest include (but are not limited to):

- Face expressions
- Emotion recognition
- Behavior analysis
- Action recognition
- Gait recognition
- 3D recognition
- Micro-expression recognition
- Body analysis
- Biometrics
- User profiling and suggestion
- Deep learning tailored for face and behavior recognition
- Representation learning
- Unsupervised and semi-supervised learning
- Multi-resolution, multi-sensor, multi-modal analysis
- Public benchmark datasets and evaluation protocols

=== SUBMISSION ===

All the submissions will be subjected to single-blind review process. Submitted papers should not have been published, accepted or under review elsewhere.

The submissions can be up to 12-15 pages for full papers or 6-8 pages for short papers (Springer Template).

All the papers must be submitted using the template you can find at this link:

<https://www.springer.com/gp/computer-science/lncs/conference-proceedings-guidelines>

All the papers should be submitted using CMT:

<https://cmt3.research.microsoft.com/FBE2020>

Accepted submissions will be presented either as oral or posters, and published in the ICPR 2020 Workshops volume, edited by Springer.

=== IMPORTANT DATES ===

Paper submission: October 10th, 2020

Author notification: November 10th, 2020

Camera-Ready Paper submission: November 15th, 2020

=== ORGANIZERS ===

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=== CONTACTS ===

For any question regarding the workshop please contact Federico Becattini at federico.becattini@unifi.it

Please feel free to distribute this call to interested parties.