

# CALL FOR PAPERS

## ACM Transactions on Multimedia Computing, Communications and Applications (TOMM)

### Special Section on Multimedia Computing and Applications of Socio-Affective Behaviors in the Wild

#### Guest Editors

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#### Introduction

Affective Computing and Social Signal Processing are two developing fields of research that promise to revolutionise the way humans interact with multimedia and technology in general. Affective Computing is the science of creating emotionally aware systems, including the automatic analysis of affect and expressive behaviours. Whereas social signal processing addresses all verbal and non-verbal communicative signalling during social interactions, be they of an affective nature or not. Despite the scientific and technological revolutions of the last decades in these fields, there is still an urgent need to advance emotion and social behaviors recognition for multimodal interface interaction to a level where systems are able to deal with large volumes of non-prototypical naturalistic behaviour collected in ecologically valid environments, as this is exactly the type of data that applications would have to face in the real world. One application of novel multimodal interface interaction is the analysis of behaviour that changes due to medical conditions. By their very definition, mood and developmental disorders are directly related to affective state, and therefore affective computing during interaction with e.g. virtual humans or other multimodal interfaces is a promising approach to improve the diagnosis of depression and autism spectrum disorders, but also the empowerment of the patients in medical care services.

#### Scope, Description, and More Information

This special section seeks papers describing significant research contributions in the domains of affective computing or social signal processing; each paper should show enough evidence of contributions to the processing of data captured in ecologically valid situations, i.e., "in the wild". Areas of interest includes, but are not limited to:

- Affective and social behaviors analysis from facial, vocal, and bodily expressions captured in the wild
- Atypical behaviors - mood and developmental disorders - understanding from multimedia
- Ecologically valid databases for training and testing
- Intelligent methods for active and efficient learning for socio-affective behaviors analysis
- Robust methods for cross-cultural and/or noisy data analysis
- Context aware multimodal fusion and data analysis
- Efficient and reliable crowdsourcing techniques of large affective and social data and labels
- Emotionally and socially aware applications in multimedia

#### Schedule

- Initial submission papers due: Oct. 31, 2016
- Decision notification: Dec. 31, 2016
- Revision due: Feb. 15, 2017
- Acceptance notification: March 31, 2017
- Camera ready version due: April 15, 2017