



Call for Papers

Special issue on Face Analysis for Applications

The human face brings with its appearance and shape a number of clues enabling the extraction of information about person identity, gender, age, ethnicity, health, emotional state and physical wellness to say a few. This motivated a number of studies, addressed within a broad range of disciplines, with the aim to infer information about an individual based on the analysis of her/his face appearance, 3D structure and dynamics. Although in some cases humans are able to accomplish this inference effortlessly, the definition of a computational model to formalize the precise nature of this process remains challenging due to the high-dimensional, dynamic information space required to model the face appearance and its deformations. Nevertheless, many research teams at the crossband of computer vision, machine learning and social sciences have investigated the use of computational models to process still images and videos, 2D and 3D data, so as to enable face recognition in the wild, face learning for re-identification, age, gender and ethnicity estimation from face images, appearance prediction across aging, expression analysis for emotional and sentiment awareness, analysis of facial expressivity impairment for neurological disorder monitoring, micro-expression recognition for deception detection. The research initiatives pertaining to these problem have reached a critical stage and it is useful to streamline future research on these topics in order to make a significant impact on the many day-to-day applications that benefit from solving these problems.

This special issue seeks papers from an interdisciplinary target audience describing significant research contributions and survey papers in the domain of face analysis for applications. Areas of interest includes, but are not limited to:

- Benchmarks and datasets for training and comparison of face analysis applications
- Models of face representation and analysis for face recognition in the wild
- Models of face representation and analysis for soft biometrics
- Models of face representation and analysis for age prediction
- Models of face representation and analysis for expression/emotion recognition
- Models of face representation and analysis for micro-expression recognition
- Models of face representation and analysis for disease monitoring and rehabilitation
- Models of face representation and analysis for gaming
- Models of face synthesis on multiple attributes, e.g. gender, race, age, and expression.

Schedule

- Submission deadline: Oct. 14, 2018
- First review decision: Dec. 31, 2018
- Revision due: Feb. 15, 2019
- Acceptance notification: March 31, 2019
- Camera ready version due: April 15, 2019



Submission guidelines

The review process will comply with the standard review process of the ACM Transactions on Multimedia Computing, Communications and Applications (ACM TOMM) journal.

Prospective authors are invited to submit their manuscripts electronically after the “open for submissions” date, adhering to the ACM Transactions on Multimedia Computing, Communications and Applications (ACM TOMM) journal guidelines (see <http://tomm.acm.org/authors.cfm>). Please submit your papers through the online system and be sure to select the special issue on Face Analysis for Applications.

Manuscripts should not be published or currently submitted for publication elsewhere. Submitted manuscripts should not have been published previously, nor be under consideration for publication elsewhere. If the submission is an extended work of a previously published conference paper, please include the original work and a cover letter describing the changes that have been made. According to ACM TOMM publication policy previously published conference papers can be eligible for publication provided that at least 25% new material is included in the journal version.

Guest Editors

Pietro Pala

University of Florence, Florence, Italy

pietro.pala@unifi.it

Liming Chen

Ecole Centrale de Lyon, France

lchen@ec-lyon.fr

Di Huang

Beihang University, China

dhuang@buaa.edu.cn

Xiaoming Liu

Michigan State University, USA

liuxm@cse.msu.edu

Stefanos Zafeiriou

Imperial College, London, UK

s.zafeiriou@imperial.ac.uk