



# 8th International Workshop on Human Behavior Understanding

## Face Analytics

### Behavior Analysis for Smart Cars

15 May 2018 – Xi'An in conjunction with IEEE FG'18

#### Program Committee:

Tadas Baltrušaitis, UK  
Wei Chen, CN  
Adrian Davison, UK  
Hamdi Dibeklioglu, TR  
Jordi González, ES  
Jürgen Gall, DE  
Heikki Huttunen, FI  
Peng Liu, US  
Marwa Mahmoud, UK  
Matei Mancas, BE  
Javier J. Sanchez Medina, ES  
Teruhisa Misu, US  
Wenxuan Mou, UK  
Eshed Ohn-Bar, US  
Shogo Okada, JP  
Yannis Panagakis, UK  
Senya Polikovsky, JP  
Nicu Sebe, IT  
Caifeng Shan, NL  
Karan Sikka, US  
Xiaoyang Tan, CN  
Yan Tong, US  
Fernando De la Torre, US  
Mohan M. Trivedi, US  
Ruiping Wang, CN  
Sujing Wang, CN  
Jacob Whitehill, US  
Lijun Yin, US  
Zeynep Yücel, JP

#### Co-Chairs:

Carlos Busso, Univ. of Texas at Dallas  
Xiaohua Huang, Univ. of Oulu  
Takatsugu Hirayama, Nagoya Univ.  
Guoying Zhao, Univ. of Oulu &  
Northwest Univ. of China  
Albert Ali Salah, Boğaziçi Univ. &  
Nagoya Univ.  
Matti Pietikäinen, Univ. of Oulu  
Roberto Vezzani, Univ. of Modena and  
Reggio Emilia  
Wenming Zheng, Southeast Univ.  
Abhinav Dhall, Indian Institute of  
Technology, Ropar

#### Description

With development of computer vision and sensor technology, it becomes possible to analyze human behavior via various ways at different time-scales and at different levels of interaction and interpretation. Understanding human behavior automatically opens up enormous possibilities for human-computer interaction, with a potential of endowing the computers with a capacity to attribute meaning to users' attitudes, preferences, personality, social relationships, etc., as well as to understand what people are doing, the activities they have been engaged in, and their routines.

This workshop aims to inspect developments in selected areas where smarter computers that can sense human behavior have great potential to revolutionize the application domain. We ultimately seek to re-define the relationship between the computer and the interacting human, moving the computer from a passive observer role to a socially active participant role and enabling it to drive different kinds of interaction.

The 8th Int. Workshop on Human Behavior Understanding (HBU) and 2nd Int. Workshop on Automatic Face Analytics for Human Behavior Understanding (FaceHUB) are jointly organized at FG to gather researchers on behavior analysis and analytics. It will have two specific focus tracks dealing with "**face analytics**" and "**behavior analysis for smart cars**".

#### Topics

##### Track 1: Face analytics

Automatic deception detection  
Deep learning models for facial analysis  
Face alignment and fiducial point detection  
Continuous facial behavior analysis  
Emotion recognition in the wild  
Temporal models for face analysis  
Facial action unit detection and recognition  
Group emotion analysis  
Long-term behaviors and interaction  
Micro-expression detection, recognition and understanding  
Spontaneous affect databases  
Cross-domain facial expression recognition  
Spontaneous facial expression analysis  
Multimodal emotion recognition

##### Track 2: Behavior analysis for smart cars

Advanced driver assistance systems, assisting elderly drivers  
Behavior analysis for car safety  
Car driving simulation analysis  
Driver identification and biometrics  
Driver's face monitoring, drowsiness and fatigue detection  
Head pose and attention tracking  
Human factors and driver personalization  
Human-car interaction  
In-car social signals: aggression, frustration, boredom  
Multimodal interactive systems in cars  
Posture assessment and comfort analysis

#### Important Dates

January 28, 2018: Submission of full papers (23:59pm PST)  
February 20, 2018: Notification of acceptance  
March 1, 2018: Camera-ready  
May 15, 2018: Tentative workshop date