Editorial: Transactions on Affective Computing - changes and continuance

Björn Schuller

Editorial: *Transactions on Affective Computing* – Changes and Continuance

Björn W. Schuller

N its 7th year, the *IEEE Transactions on Affective Computing* (*TAFFC*) finds itself in an era of even broader and more general interest in the field of Affective Computing. Not only has the attention further grown over the last years, but it has also increasingly been taken up by the industry that is recently slowly feeding more and more products enriched by *Affective Computing* abilities into the consumer market.

And while interest in the field seems to be steadily rising, there has also been some change for *TAFFC* as there always is in a longer standing journal as *TAFFC* continues to mature. To begin with, at the Association for the Advancement of Affective Computing's (AAAC) 2015 6th AAAC Affective Computing and Intelligent Interaction International Conference (ACII) in Xi'An / P.R. China that took place on 21–24 September 2015, we held for the first time a special poster session on the *Most Influential Papers of TAFFC* since the journal's beginning. Fifteen nominated papers were presented and found to be of great interest by the attendees. The authors of these papers were also invited to submit a seven page extended abstract of the original journal article. The extended abstracts were published as part of the ACII 2015 conference proceedings in IEEE Xplore. The overall 21 paper nominations were made by the current and former Editors-in-Chief with help from the IEEE staff. They were strictly based on objective criteria, namely being technical, and based on citation and download statistics. They were selected from the 168 articles published in *TAFFC* up to the moment of selection, representing 13 percent of all articles in *TAFFC* at that time. The list of these 21 nominees is found below in the Appendix. Four finalists were identified and considered carefully by a committee of three experts in the field of Affective Computing. The winning article was invited as an oral presentation at ACII, which found exceptional interest at the conference. We would like to express our hearty congratulations to all nominees and in particular to the winning contribution by Georgios N. Yannakakis for the paper coauthored with Julian Togelius entitled "Experience-Driven Procedural Content Generation". To further emphasize the link between *TAFFC* and the AAAC (the former HUMAINE Association behind the foundation of *TAFFC* that has meanwhile been registered as a charity in the United Kingdom) and its binannual ACII conference, a special section with the best papers presented at the conference is in preparation.

Besides, the editorial board has seen some changes, as five long-running members have come up for retirement: I would like to particularly thank Elisabeth André (University of Augsburg, Germany), Sidney D'Mello (Notre Dame, USA), Ursula Hess (Humboldt University, Berlin, Germany), Simon Lucey (Queensland University of Tech, Australia), and Ana Paiva (INESC-ID and IST, GAIPS) for their brilliant service as associate editors over the last years.

In exchange, it is my deepest joy to be able to announce that we could win the following highly esteemed new members for the editorial board named in no particular order: for physiological measurement Bin Hu (Lanzhou University, P.R. China) and Mohammad Soleymani (University of Geneva, Switzerland), for multimodal affective analysis and affective agent systems M. Ehsan Hoque (University of Rochester, USA) and Stefan Scherer (University of Southern California, USA), for sentiment analysis and natural language processing Fabrizio Sebastiani (Qatar Computing Research Institute, Qatar), for speech analysis Julien Epps (The University of New South Wales, Sydney, Australia), and for facial expression analysis Hatice Gunes (Queen Mary University London, United Kingdom), Maja Pantic (Imperial College London, United Kingdom), and Michel Valstar (University of Nottingham, United Kingdom).

A final important change is the shift of the Editor in Chief that took effect In January 2015. A very special thank you in this respect is dedicated to Jonathan Gratch (University of Southern California, USA) from whom I took office, and who—as the first Editor in Chief—brought the journal up to its excellent present shape by his unrivalled dedication and talent: at take-over, the official Impact Factor was 2.675 and it can rightfully be named the leading journal in its field. It is quite a challenge to continue a journal in such outstanding standing and it is my particular delight being supported so formidably by the staff at IEEE including Samantha Jacobs, Hilda Carman, Kathy Santa Maria, and Kimberly Sperka. May the journal further flourish by outstanding authors and articles, excellent editors and reviewers, making it appealing to the best readers.

With best wishes for 2016,

Björn W. Schuller
Editor-in-Chief

APPENDIX:

The following is a list of the 21 *Most Influential Papers of TAFFC Nominees* in alphabetical order by title from *TAFFC*'s beginning until 2015 – we heartily congratulate all nominees:

1. "Aspect-Based Opinion Polling from Customer Reviews," J. Zhu, H. Wang, M. Zhu, B. K. Tsou, and M. Ma
2. "Automatic Personality Perception: Prediction of Trait Attribution Based on Prosodic Features," G. Mohammadi, and A. Vinciarelli
3. "Building Autonomous Sensitive Artificial Listeners," M. Schröder, E. Bevacqua, R. Cowie, F. Eyben, H. Gunes, D. Heylen, M. ter Maat, G. McKeown, S. Pammi, M. Pantic, C. Pelachaud, B Schuller, E. de Sevin, M. Valstar, and M. Wöllmer
4. "Context-Sensitive Learning for Enhanced Audiovisual Emotion Classification," A. Metallinou, M. Wöllmer, A. Katsamanis, F. Eyben, B. Schuller, and S. Narayanan
5. "Continuous Prediction of Spontaneous Affect from Multiple Cues and Modalities in Valence-Arousal Space," M. Nicolaou, H. Gunes, and M. Pantic
6. "Cross-Corpus Acoustic Emotion Recognition: Variances and Strategies," B. Schuller, B. Vlasenko, F. Eyben, M. Wöllmer, A. Sthlsatz, A. Wendermuth, and G. Rigoll
7. "ECG Pattern Analysis for Emotion Detection," F. Agrafioti, D. Hatzinakos, and A. K. Anderson
8. "Emotion Recognition from Brain Signals Using Hybrid Adaptive Filtering and Higher Order Crossings Analysis," P. C. Petrantonakis and L. J. Hadjileontiadis
9. "Emotion Recognition of Affective Speech Based on Multiple Classifiers Using Acoustic-Prosodic Information and Semantic Labels," C. H. Wu and W. B. Liang
10. "Experience-Driven Procedural Content Generation," G. N. Yannakakis and J. Togelius
11. "Crowdsourcing Facial Responses to Online Videos," D. McDuff, R. E. Kaliouby, and R. Picard
12. "Exploring Fusion methods for Multimodal Emotion Recognition with Missing Data," J. Wagner, E. Andre, F. Lingenfelser, and J. Kim
13. "Exploring Temporal Patterns in Classifying Frustrated and Delighted Smiles," M. E. Hoque, D. J. McDuff, and R. Picard
14. "Facial Expression Recognition in the Encrypted Domain Based on Local Fisher Discriminant Analysis," Y. Rahulamathavan, R. C.-W. Phan, J. A. Chambers, and D. J. Parish
15. "Facial Expression Recognition Using Facial Movement Features," L. Zhang and D. Tjondronegoro
16. "Interdependencies among Voice Source Parameters in Emotional Speech," J. Sundberg, S. Patel, E. Björkner, and K. R. Scherer
17. "Multimodal Emotion Recognition in Response to Videos," M. Soleymani, M. Pantic, and T. Pun
18. "Optimal Arousal Identification and Classification for Affective Computing Using Physiological Signals: Virtual Reality Stroop Task," D. Wu, C. G. Courtney, B. J. Lance, S. S. Narayanan, M. E. Dawson, K. S. Oie, and T. D. Parsons
19. "The Role of Nonlinear Dynamics in Affective Valence and Arousal Recognition," G. Valenza, A. Lanata, and E. P. Scilingo
20. "SentiFul: A Lexicon for Sentiment Analysis," A. Neviarouskaya, H. Prendinger, and M. Ishizuka
21. "Toward a Minimal Representation of Affective Gestures," D. Glowinski, N. Dael, A.Camurri, G. Volpe, M. Mortilaro, and K. Scherer