Multimedia and human-computer interaction (Interacción 2018) [SI 1141T]

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INTERACCIÓN is the annual International Conference on Human-Computer Interaction promoted by the Spanish *Asociación para la Interacción Persona-Ordenador* (AIPO), whose main aim is to promote and disseminate recent advances in the field of Human-Computer Interaction (HCI).

INTERACCIÓN 2018, the 19th edition of the Conference, was held on September 12–14, 2018 at the Universitat de les Illes Balears in Palma (Mallorca, Spain). The Conference attracted researchers, practitioners, educators, and students to exchange and discuss the most recent research results, experiences, and innovations in the discipline of HCI. The Conference Program Committee selected 29 regular papers and 16 short papers to be presented at the conference and published in the conference proceedings [1].

This special issue of *Multimedia Tools and Applications* dedicated to the Conference brings together two selected invited papers that were presented at the Conference together with three other works coming from the open Call. Based on the Conference review criteria and the comments provided by reviewers in a double-blind process, the Guest Editors Cristina Manresa-Yee and Ramon Mas-Sansó selected two works from the Conference to be included in this special issue related to Multimedia and HCI. The works from the Conference were substantially extended and revised for journal publication. All papers published in this special issue went through a rigorous refereeing process and were accepted on the basis of quality.

We are glad to offer in this special issue some very interesting examples of multimedia tools and applications related to recognizing human actions, improving captions and recognizing emotions in speech recognition, analyzing voice interaction on tv and navigating GIS maps in immersive virtual environments.

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The first paper, by Choi, Kang, Joo et al. is entitled “Real-time informatized caption enhancement based on speaker pronunciation time database”. In this work, the authors aim to improve the inaccuracy of current informatized captions in speech recognition in noisy environments.

Santos, Abreu, Beça et al. present “Voice Interaction on TV: analysis of natural language interaction models and recommendations for voice user interfaces”. The authors evaluate a set of voice interaction models to identify the most appropriate solution for interactive television. Usability, interaction and privacy perception are addressed to analyze the strengths and limitations of current voice interaction models.

In the work “An empirical comparison of interaction styles for map interfaces in immersive virtual environments” by Santos-Torres, Zarraonandia, Díaz et al., the authors provide insights on how to design efficient and natural interaction on geographical information systems interfaces using virtual reality.

The paper by Bakhshi, Chalup, Harimi et al. entitled “Recognition of emotion from speech using evolutionary cepstral coefficients” proposes a method that optimizes the amplitude and bandwidth of Mel filters to extract new Cepstral features for speech emotion recognition and compares it to the original method to show its effectiveness.

Finally, Li, Hou, Liang et al. present “Human action recognition based on 3D body mask and depth spatial-temporal maps”. In this work, the authors propose a 3D body mask method and a new depth sequence representation to recognize human actions from video sequences and to improve the accuracy of current techniques.

The works presented in this special issue are a step forward in the design and development of multimedia tools and applications. We hope that the readers enjoy this special issue and get inspiration and insights from the works included. We thank the authors and reviewers for their professional work and contributions. We are also thankful to Borko Furht (Editor-in-Chief) and the Editorial team for their help and support.

[1] Manresa-Yee, C. & Mas Sansó, R. (Eds), Proceedings of the XIX International Conference on Human Computer Interaction, Interacción 2018, Palma, Spain, September 12–14, 2018. ACM 2018, ISBN 978–1–4503-6491-1.

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