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# Human Behavior Understanding

First International Workshop, HBU 2010  
Istanbul, Turkey, August 22, 2010  
Proceedings

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# Preface

It was a great pleasure to organize the First International Workshop on Human Behavior Understanding (HBU), which took place as a satellite workshop to International Conference on Pattern Recognition (ICPR) on August 22, 2010, in Istanbul, Turkey. This workshop arose from the natural marriage of pattern recognition with the rapidly advancing area of human behavior analysis. Our aim was to gather researchers dealing with the problem of modeling human behavior under its multiple facets (expression of emotions, display of relational attitudes, performance of individual or joint actions, etc.), with particular attention to pattern recognition approaches that involve multiple modalities and those that model actual dynamics of behavior.

The contiguity with ICPR, one of the most important events in the pattern recognition and machine learning communities, is expected to foster cross-pollination with other areas, for example temporal pattern mining or time series analysis, which share their important methodological aspects with human behavior understanding. Furthermore, the presence of this workshop at ICPR was meant to attract researchers, in particular PhD students and postdoctoral researchers, to work on the questions of human behavior understanding that is likely to play a major role in future technologies (ambient intelligence, human-robot interaction, artificial social intelligence, etc.), as witnessed by a number of research efforts aimed at collecting and annotating large sets of multi sensor data, collected from observing people in natural and often technologically challenging conditions.

This proceedings volume contains 13 papers presented at the workshop, as well as the abstracts of the keynote talks by Ramesh Jain (UCI) and Ivan Laptev (INRIA), and a summarizing paper by the editors. We received 29 submissions in total, and each paper was peer-reviewed by two members of the Technical Program Committee.

We would like to thank our Program Committee members and reviewers for their rigorous feedback, and our keynote speakers for their contributions. We also thank the ICPR organization team, most importantly Aytül Erçil and Osman Rahmi Fıçıcı for their support. The website of the workshop was created by Hamdi Dibeklioglu and maintained by Osman Rahmi through its countless updates.

August 2010

Albert Ali Salah  
Theo Gevers  
Nicu Sebe  
Alessandro Vinciarelli

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