Preface

When it comes to modeling emotions, contextual instances cannot be neglected. The concept of context is, to a certain extent, a complex one, since it includes cultural, social, physical, and individual features that shape human interactional exchanges. This second volume accounts for contexts, in particular, social contexts and social signals that must be interpreted to correctly and successfully decode the semantic and emotional meaning of interactional exchanges. To this aim, several experts, from different scientific domains, are describing behaviors to be adopted or interpreted for, as well as mathematical algorithms to model contextual instances and relative information communication technology (ICT) interfaces for developing robotic socially believable applications. In this regard, the volume presents the recent research works on robotics approaching the domestic spheres and recent research efforts for allowing robotic systems of automaton levels of intelligence, where "intelligent" is the system's ability to implement a natural interaction with human.

The implementation of such context-aware situated ICT systems should contribute to improve the quality of life of the end users through: (1) The development of shared digital data repositories and annotation standards for benchmarking; (2) new methods for data processing and data flow coordination through synchronization, temporal organization, and optimization of new encoding features (identified through human behavioral analyses); and (3) computational models synthesizing the human ability to rule individual choices, perception, and actions. The final goal would be to produce machines equipped with human-level automaton intelligence.

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