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Preface

This volume contains the proceedings of the 1st International Conference on Affective Computing and Intelligent Interaction (ACII 2005) held in Beijing, China, on 22–24 October 2005.

Traditionally, the machine end of human–machine interaction has been very passive, and certainly has had no means of recognizing or expressing affective information. But without the ability to process such information, computers cannot be expected to communicate with humans in a natural way. The ability to recognize and express affect is one of the most important features of human beings. We therefore expect that computers will eventually have to have the ability to process affect and to interact with human users in ways that are similar to those in which humans interact with each other. Affective computing and intelligent interaction is a key emerging technology that focuses on myriad aspects of the recognition, understanding, and expression of affective and emotional states by computers. The topic is currently a highly active research area and is receiving increasing attention. This strong interest is driven by a wide spectrum of promising applications such as virtual reality, network games, smart surveillance, perceptual interfaces, etc.

Affective computing and intelligent interaction is a multidisciplinary topic, involving psychology, cognitive science, physiology and computer science. ACII 2005 provided a forum for scientists and engineers to exchange their technical results and experiences in this fast-moving and exciting field. A total of 45 oral papers and 82 poster papers included in this volume were selected from 205 contributions submitted by researchers worldwide. The papers collected here cover a wide range of topics, such as facial expression recognition, face animation, emotional speech synthesis, intelligent agent, and virtual reality. We wish to thank the members of the Program Committee for their efforts in reviewing all these papers under tight time constraints, the members of the Organizing Committee for their careful and professional work on the logistics of the conference, and all authors for submitting their high-quality work to ACII 2005. Last but not least, the cooperation of Springer as the publisher of this volume is gratefully acknowledged.

We hope that readers find this volume a useful reference on affective computing and intelligent interaction.

August 2005

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Program Committee Chairs: Jianhua Tao,
Nick Campbell, Andrew Ortony
ACII 2005 was organized by the National Laboratory of Pattern Recognition, Institute of Automation, Chinese Academy of Sciences. The conference webpage is located at http://www.affectivecomputing.org/2005/index.htm

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