

Preface

Affective computing is a fascinating new area of research emerging in computer science. It dwells on problems where “computing is related to, arises from or deliberately influences emotions” (*Affective Computing* by Picard 1997). Following this new research direction and considering the human element as crucial in designing and implementing interactive intelligent interfaces, affective computing is now influencing the way we shape, design, construct and evaluate human/computer and computer-mediated communication. But how can computers play a role in affective interactions? How can they induce emotions, recognize emotions, represent or express emotions? What kinds of interactions and what kinds of mechanisms should they have in order for affective interactions to be established with users?

To discuss these questions we decided to organise a one and a half day workshop entitled “Affective interactions: towards a new generation of interfaces” in Sienna in conjunction with the 1999 I3 Annual Conference. This book brings together some selected papers presented as first drafts at the workshop plus some extra contributions such as an interview with Prof. Rosalind Picard, a pioneer researcher in this field.

The papers combine different perspectives, theories and cases showing how to bring an affective dimension into the interaction between users and computer applications.

I would like to take this opportunity to thank many people who were involved in the preparation of this book, in particular the programme committee of the workshop and the reviewers of the book. I also want to thank all my colleagues at INESC-GAIVA group in Portugal and at the Imperial College, Department of Electrical and Electronic Engineering, London, UK. Special thanks to Carlos Martinho, Marco Vala and Nikos Drakos who helped me in the preparation of the original proceedings used during the workshop and in the finalization of this volume. Thanks to the I3 conference organisers for providing such an inspiring setting to host the event. Thanks also to Mr. Alfred Hoffmann from Springer for his help and especially for his patience during the preparation of this volume.

It is my hope that the research presented in this book can contribute greatly to an increased understanding of the role that affect plays in human/computer and computer-mediated interactions as well as for stimulating further work in this challenging new area of research.

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