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Fabio Paternò

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# **Model-Based Design and Evaluation of Interactive Applications**



Springer

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## **Background of author**

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Fabio Paternò received his Laurea Degree in Computer Science from the University of Pisa (Italy) and a Ph.D. in Computer Science from the University of York (UK).

Since 1986 he has been a researcher at CNUCE-C.N.R., Pisa, where he is head of the HCI group. He has worked in various national and international projects on user interfaces-related topics. He has been the coordinator of the MEFISTO (Modelling Evaluating and Formalising Interactive Systems Using Tasks and Interaction Objects) Long Term Esprit European Project.

He has developed the ConcurTaskTrees notation for specifying task models, which has been used in various industries and universities, and related methods for supporting the design and evaluation of interactive applications. His current research interests include Methods and Tools for User Interface Design and Usability Evaluation, Formal Methods for Interactive Systems, and Design of User Interfaces for Safety Critical Interactive Systems. He has published more than sixty papers in refereed international conferences or journals.

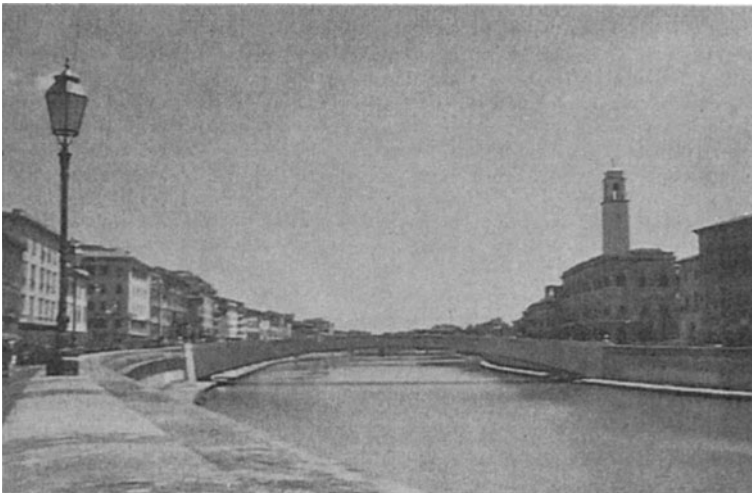
He was the chair of the first International Workshop on Design, Specification, Verification of Interactive Systems. He is co-editor of a book on Formal Methods in Human-Computer Interaction. He has been a member of the Programme Committee of the main international HCI conferences. He is a member of the IFIP Technical Committee 13 on Human Computer Interaction. He has been Papers Co-Chair of the ACM CHI 2000 conference.

# Preface

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This book aims to be a bridge. A bridge between science and practice, creativity and engineering, human-computer interaction and software engineering, with possible links to artificial intelligence and formal methods.

Bridges are important because they allow communication between worlds which were previously separated, thus enabling new results to be obtained.



Ponte di Mezzo, Pisa.

The increasing diffusion of interactive software-based applications in an increasing number of contexts, possible purposes and types of users, requires new methods for improving the design cycle of interactive applications and obtaining more usable artefacts. This stimulated the need to bring together aspects such as task modelling, dialogue design, reuse patterns, and usability evaluation with the purpose of explaining the basic ideas and concepts and discussing the possible results. The logical structure of the book focuses on reporting recent thinking in this area

showing the connections between the various parts. It makes accessible work which has previously mainly appeared only in research-oriented publications.

I hope it will prove useful to help the reader understand issues concerning the use of models in design and evaluation of interactive applications, to indicate possible solutions, and to foster new work able to improve previous solutions. A lot of work needs still to be done to improve current methods and tools to design and develop usable interactive applications.

Fabio Paternò  
August 1999,  
Pisa, Italy

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