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## **IFIP – The International Federation for Information Processing**

IFIP was founded in 1960 under the auspices of UNESCO, following the First World Computer Congress held in Paris the previous year. An umbrella organization for societies working in information processing, IFIP's aim is two-fold: to support information processing within its member countries and to encourage technology transfer to developing nations. As its mission statement clearly states,

*IFIP's mission is to be the leading, truly international, apolitical organization which encourages and assists in the development, exploitation and application of information technology for the benefit of all people.*

IFIP is a non-profitmaking organization, run almost solely by 2500 volunteers. It operates through a number of technical committees, which organize events and publications. IFIP's events range from an international congress to local seminars, but the most important are:

- The IFIP World Computer Congress, held every second year;
- Open conferences;
- Working conferences.

The flagship event is the IFIP World Computer Congress, at which both invited and contributed papers are presented. Contributed papers are rigorously refereed and the rejection rate is high.

As with the Congress, participation in the open conferences is open to all and papers may be invited or submitted. Again, submitted papers are stringently refereed.

The working conferences are structured differently. They are usually run by a working group and attendance is small and by invitation only. Their purpose is to create an atmosphere conducive to innovation and development. Refereeing is less rigorous and papers are subjected to extensive group discussion.

Publications arising from IFIP events vary. The papers presented at the IFIP World Computer Congress and at open conferences are published as conference proceedings, while the results of the working conferences are often published as collections of selected and edited papers.

Any national society whose primary activity is in information may apply to become a full member of IFIP, although full membership is restricted to one society per country. Full members are entitled to vote at the annual General Assembly, National societies preferring a less committed involvement may apply for associate or corresponding membership. Associate members enjoy the same benefits as full members, but without voting rights. Corresponding members are not represented in IFIP bodies. Affiliated membership is open to non-national societies, and individual and honorary membership schemes are also offered.

Peter Forbrig Fabio Paternó  
Annelise Mark Pejtersen (Eds.)

# Human-Computer Interaction

Second IFIP TC 13 Symposium, HCIS 2010  
Held as Part of WCC 2010  
Brisbane, Australia, September 20-23, 2010  
Proceedings

Volume Editors

Peter Forbrig  
University of Rostock, Department of Computer Science  
Albert-Einstein-Str. 21, 18051 Rostock, Germany  
E-mail: peter.forbrig@uni-rostock.de

Fabio Paternó  
ISTI-CNR  
Via G.Moruzzi 1, 56124 Pisa, Italy  
E-mail: fabio.paterno@isti.cnr.it

Annelise Mark Pejtersen  
Risø National Laboratory, Centre for Cognitive Systems Engineering (CSE)  
4000 Roskilde, Denmark  
E-mail: annelise.m.pejtersen@risoe.dk

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# **IFIP World Computer Congress 2010 (WCC 2010)**

## **Message from the Chairs**

Every two years, the International Federation for Information Processing (IFIP) hosts a major event which showcases the scientific endeavors of its over one hundred technical committees and working groups. On the occasion of IFIP's 50th anniversary, 2010 saw the 21st IFIP World Computer Congress (WCC 2010) take place in Australia for the third time, at the Brisbane Convention and Exhibition Centre, Brisbane, Queensland, September 20–23, 2010.

The congress was hosted by the Australian Computer Society, ACS. It was run as a federation of co-located conferences offered by the different IFIP technical committees, working groups and special interest groups, under the coordination of the International Program Committee.

The event was larger than ever before, consisting of 17 parallel conferences, focusing on topics ranging from artificial intelligence to entertainment computing, human choice and computers, security, networks of the future and theoretical computer science. The conference History of Computing was a valuable contribution to IFIP's 50th anniversary, as it specifically addressed IT developments during those years. The conference e-Health was organized jointly with the International Medical Informatics Association (IMIA), which evolved from IFIP Technical Committee TC-4 "Medical Informatics".

Some of these were established conferences that run at regular intervals, e.g., annually, and some represented new, groundbreaking areas of computing. Each conference had a call for papers, an International Program Committee of experts and a thorough peer reviewing process of full papers. The congress received 642 papers for the 17 conferences, and selected 319 from those, representing an acceptance rate of 49.69% (averaged over all conferences). To support interoperation between events, conferences were grouped into 8 areas: Deliver IT, Govern IT, Learn IT, Play IT, Sustain IT, Treat IT, Trust IT, and Value IT.

This volume is one of 13 volumes associated with the 17 scientific conferences. Each volume covers a specific topic and separately or together they form a valuable record of the state of computing research in the world in 2010. Each volume was prepared for publication in the Springer IFIP Advances in Information and Communication Technology series by the conference's volume editors. The overall Publications Chair for all volumes published for this congress is Mike Hinchey.

For full details of the World Computer Congress, please refer to the webpage at <http://www.ifip.org>.

June 2010            Augusto Casaca, Portugal, Chair, International Program Committee  
Phillip Nyssen, Australia, Co-chair, International Program Committee  
Nick Tate, Australia, Chair, Organizing Committee  
Mike Hinchey, Ireland, Publications Chair  
Klaus Brunnstein, Germany, General Congress Chair

## Preface

The IFIP World Computer Congress (WCC) is one of the most important conferences in the area of computer science at the worldwide level and it has a federated structure, which takes into account the rapidly growing and expanding interests in this area. Informatics is rapidly changing and becoming more and more connected to a number of human and social science disciplines. Human–computer interaction is now a mature and still dynamically evolving part of this area, which is represented in IFIP by the Technical Committee 13 on HCI. In this WCC edition it was interesting and useful to have again a Symposium on Human–Computer Interaction in order to present and discuss a number of contributions in this field.

There has been increasing awareness among designers of interactive systems of the importance of designing for usability, but we are still far from having products that are really usable, and usability can mean different things depending on the application domain. We are all aware that too many users of current technology often feel frustrated because computer systems are not compatible with their abilities and needs in existing work practices. As designers of tomorrow’s technology, we have the responsibility of creating computer artifacts that would permit better user experience with the various computing devices, so that users may enjoy more satisfying experiences with information and communications technologies. This has raised new research areas, such as ambient intelligence, natural interaction, end user development, work analysis and cultural and social interaction.

The interest in the conference was positive in terms of submissions and participation. We received 56 contributions, 19 submission were accepted as long presentations and 7 as short ones. Additionally, five submissions were accepted as poster presentations. The selection was carried out carefully by the International Program Committee. The result is a set of interesting and stimulating papers that address such important issues as specification and modeling, user-centered development, usable systems, social and cultural problems, mobile and Web applications and interaction. The interest shown in the conference was truly world-wide: if we consider both full and short papers, we had authors from Europe, South America, Canada, Japan, Singapore, and South Africa. The final program of the symposium included one technical invited speaker: Penelope Sanderson from The University of Queensland on “The Power and the Puzzles of Auditory Interfaces.” This is a very interesting topic for many application domains.

We hope that the IFIP Symposium on Human–Computer Interaction contributed to the World Computer Congress in terms of many interesting discussions and that the second symposium was even more successful than its first edition in Milan in 2008.

June 2010

Peter Forbrig  
Fabio Paternò  
Annelise Mark Pejtersen

# HCIS 2010 Conference Organization

The Second IFIP Human–Computer Interaction Symposium  
(HCIS 2010)

was a co-located conference organized under the auspices of the  
IFIP World Computer Congress (WCC) 2010  
in Brisbane, Australia

Peter Forbrig  
HCIS 2010 Co-chair  
Peter.forbrig@uni-rostock.de

Fabio Paternò  
HCIS 2010 Co-chair  
fabio.paterno@isti.cnr.it

Annelise Mark Pejtersen  
HCIS 2010 Co-chair  
ampcse@mail.dk

## HCIS 2010 Program Committee

Julio Abascal, Spain  
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