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

IFIP is the global non-profit federation of societies of ICT professionals that aims at achieving a worldwide professional and socially responsible development and application of information and communication technologies.

IFIP is a non-profit-making organization, run almost solely by 2500 volunteers. It operates through a number of technical committees and working groups, which organize events and publications. IFIP's events range from large international open conferences to working conferences and local seminars.

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 generally smaller and occasionally by invitation only. Their purpose is to create an atmosphere conducive to innovation and development. Refereeing is also 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.

IFIP distinguishes three types of institutional membership: Country Representative Members, Members at Large, and Associate Members. The type of organization that can apply for membership is a wide variety and includes national or international societies of individual computer scientists/ICT professionals, associations or federations of such societies, government institutions/government related organizations, national or international research institutes or consortia, universities, academies of sciences, companies, national or international associations or federations of companies.

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Human Work Interaction Design


Artificial Intelligence and Designing
for a Positive Work Experience
in a Low Desire Society


6th IFIP WG 13.6 Working Conference, HWID 2021
Beijing, China, May 15–16, 2021
Revised Selected Papers

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Preface

Human Work Interaction Design (HWID) was established in September 2005 as the sixth working group (WG 13.6) of the IFIP Technical Committee 13 on Human-Computer Interaction (HCI). The scope of this group is the analysis and interaction design of a variety of complex work and life contexts found in different business and application domains. For this purpose, it is important to establish relationships between extensive empirical work domain studies and HCI design. WG 13.6 aims to provide the basis for an improved cross-disciplinary cooperation and mutual inspiration among researchers from many disciplines that by nature are involved in the deep analysis of a work domain. Complexity is hence the key notion in the activities of this working group, but it is not a priori defined or limited to any particular domain. WG 13.6 initiates and fosters new research initiatives and developments, as well as an increased awareness of HWID in the HCI curriculum.

This volume includes chapters extending the papers presented at the 6th HWID Working Conference (HWID 2021) that was held virtually from the Beijing University of Posts and Telecommunications (BUPT), Beijing, China, during May 15–16, 2021. In continuation of the Human Work Interaction Design Working Conference series, the sixth edition was aimed at investigating the theme “Artificial Intelligence and Designing for a Positive Work Experience in a Low Desire Society”.

Initially, a ‘Call for Papers’ was announced on the website of the HWID 2021 conference and authors were invited to submit papers through Springer’s Online Conference Service (OCS). In total, 14 research papers were submitted for the conference, out of which nine papers were accepted as extended versions for the proceedings, along with one additional paper. All papers were reviewed by the Program Committee, along with external reviewers, with two reviewers allocated to each paper. Accepted papers were virtually and/or physically presented at the conference. All presenters were encouraged to submit a revised version based on the input from the audience at the conference to the conference organizers (paper chairs and general chairs). In addition, a ‘Call for New/Extended Papers’ was announced to the authors and through the IFIP 13.6 - HWID email list after the conference. From the group of organizers of the conference, an editor team was put together. The lead editor, Ganesh Bhutkar, then configured a cloud / google drive to which potential authors could submit their extended / new papers. The review process was further extended with three reviews per paper. The pool of reviewers was the same as for the main conference with a few additional reviewers added. The review round was followed by two additional rounds of editorial reviews. Papers with at least two positive single blind reviews and also consensus-acceptance among the editors were then accepted for the LNCS book.

HWID has been endeavoring to enhance the positive work experiences at workplaces by providing employees pleasurable and meaningful user experiences via the tools used at work. HWID 2021 directed attention to the ‘low desire’ phenomenon, where people have lower desire for success, no ambitions, needs, or expectations.

These people push back against working around the clock, avoid conflicts, yearn to be free of strong feelings, and do not take anyone or anything too seriously. HWID 2021 attempted to look into the relationship between happiness and IT-enabled overworking, the resulting work experiences, and how to provide solutions from the perspective of Human Work Interaction Design.

Artificial intelligence (AI) is making a difference to the workplace and complicating the situation further. On one hand, AI replaces human workers by working faster with fewer errors than humans, which enables AI to do many of the boring and redundant jobs. On the other hand, many organizations are already beginning to use AI as a design element to enhance human intelligence, and design positive experiences in the workplace. As a result, there are growing concerns that AI will take away jobs from humans or in other ways become dominating. The theme of HWID 2021 emphasized the insights into the relationship between low desire and work experience, and how AI will moderate this relationship because parts of the work might be taken away by AI.

The chapters in this book focus on answering these questions to support professionals, academics, national labs, and industry engaged in human work analysis and interaction design for the workplace. The first section of the book has a collection of chapters focusing on ‘Trends in Human Work Interaction Design’. The second section has chapters related to ‘Workplace and Work Experience Analysis for Interaction Design’. The third and last section has chapters presenting case studies about ‘Artificial Intelligence (AI) for Human Work’.

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