CoPDA 2018

5th International Workshop on Cultures of Participation in the Digital Age: Design Trade-offs for an Inclusive Society CoPDA 2018 Castiglione della Pescaia (GR), Italy, May 29, 2018 Proceedings
Volume Editors

Barbara Rita Barricelli
Università degli Studi di Milano
20135 Milano, Italy
E-mail: barricelli@di.unimi.it

Gerhard Fischer
University of Colorado at Boulder
Boulder, CO 80309-0430
E-mail: gerhard@colorado.edu

Daniela Fogli
Università degli Studi di Brescia
25123 Brescia, Italy
E-mail: daniela.fogli@unibs.it

Anders Mørch
University of Oslo
0317 Oslo, Norway
E-mail: anders.morch@iped.uio.no

Antonio Piccinno
Università degli Studi di Bari “A. Moro”
70125 Bari, Italy
E-mail: antonio.piccinno@uniba.it

Stefano Valtolina
Università degli Studi di Milano
20135 Milano, Italy
E-mail: valtolin@di.unimi.it
Preface

This volume includes the proceedings of the Fifth edition of the International Workshop on Cultures of Participation in the Digital Age (CoPDA). Cultures of participation are the result of the current shift from consumer cultures, where people are mainly passive recipients of artifacts and systems, to cultures in which users are actively involved in the development of the solutions to their problems. Therefore, this requires that designers understand related challenges and offer opportunities for empowering users to develop novel skills and create their own artifacts. The workshop series aims at involving researchers and practitioners in the discussion of the above topics, by presenting their research and sharing ideas on a specific edition theme.

The CoPDA series started with a first edition in 2013, co-located with the Fourth International Symposium on End-User Development (IS-EUD 2013) held in Copenhagen (Denmark). The main theme of the first edition was “Empowering End Users to Improve their Quality of Life” [1], [2]. The second edition of the workshop was held on May 27, 2014 in Como (Italy), co-located with the International Working Conference on Advanced Visual Interfaces (AVI 2014) and the main theme was “Social computing for Working, Learning, and Living” [3], [4]. The third edition of the CoPDA workshop was focused on “Coping with Information, Participation, and Collaboration Overload” and was held on May 26, 2015 in Madrid, co-located with the Fifth International Symposium on End-User Development (IS-EUD 2015) [5], [6]. The Fourth edition of the workshop was held on October 23, 2016 in Gothenburg, co-located with the Ninth Nordic Conference on Human-Computer Interaction (NordiCHI 2016) [7], [8].

This volume collects papers accepted and presented at the CoPDA 2018 workshop, held on May 29, 2018 in Castiglione della Pescaia (Italy), co-located with the International Conference on Advanced Visual Interface (AVI 2018). The main theme of this edition is “Design Trade-offs for an Inclusive Society”. The United Nations defined ‘social inclusion’ as “the process of improving the terms of participation in society, particularly for people who are disadvantaged, through enhancing opportunities, access to resources, voice and respect for rights”. To fully understand the extent to which inclusion has to be brought into society, the diversity concept is analyzed, in order to explore and discuss the design trade-offs that diversity (and thus the need for inclusion) may introduce in cultures of participation. An extended description of the workshop is included in the main conference volume [9].

Each submission has been reviewed by at least 2 members of the Program Committee, and the review process allowed us to select 11 papers for presentation at the workshop. They are included in this proceedings volume.

We are grateful to the Program Committee members, who carried out careful reviews and provided supportive feedbacks to the authors. We also thank all the contributors for sharing their ideas and for their participation in the discussions during the workshop. We finally would like to thank the AVI 2018 Conference Chairs and Workshop Chairs for giving us the possibility of organizing the workshop. The support of EasyChair system for managing submission, review and proceedings production is acknowledged.

May 2018
Milano, Brescia, Boulder, Oslo, and Bari

Barbara Rita Barricelli
Daniela Fogli
Gerhard Fischer
Anders Mørch
Antonio Piccinno
Stefano Valtolina

References


Program Committee

Jose Abdelnour-Nocera (University of West London, United Kingdom)
Simone D. J. Barbosa (PUC-Rio, Brasil)
Federico Cabitza (Università degli Studi di Milano-Bicocca, Italy)
Pedro Campos (University of Madeira, Portugal)
Torkil Clemmensen (Copenhagen Business School, Denmark)
Serena Di Gaetano (Università degli Studi di Milano, Italy)
Ines Di Loreto (UTT - Université de Technologie de Troyes, France)
Rosella Gennari (Free University of Bozen-Bolzano, Italy)
Arminda Guerra Lopes (Instituto Politécnico de Castelo Branco, Portugal)
Jo Herstad (University of Oslo, Norway)
Teemu Leinonen (Aalto University, Finland)
Angela Locoro (Università degli Studi di Milano-Bicocca, Italy)
Johan Lundin (University of Gothenburg, Sweden)
Monica Maceli (Pratt Institute, USA)
Panos Markopoulos (TU Eindhoven, The Netherlands)
Alessandra Melonio (Free University of Bozen-Bolzano, Italy)
Louise Mifsud (Oslo and Akershus University College of Applied Sciences, Norway)
# Table of Contents

## Introduction to Design Trade-offs

Design Trade-Offs for an Inclusive Society: Frameworks, Examples, and Challenges .......................................................... 1  
*Gerhard Fischer*

## Trade-offs in Designing for Elderly People

HeartMan: (Self-)Managing Chronic Heart Failure ......................... 8  
*Jan Derboven*

Trade-offs in the Design of Multimodal Interaction for Older Adults ...... 15  
*Gianluca Schiavo, Michela Ferron, Ornella Mich and Nadia Mana*

## Design Trade-offs in Education

Prototyping for Investigating Affective Objects with and for Children .... 21  
*Rosella Gennari, Alessandra Melonio and Secil Ugur Yavuz*

Reflections on using Story-Dialogue Method in a workshop with interaction design students ................................................... 34  
*Diana Saplacan, Jo Herstad, Marthe Nikoline Elsrud and Zada Pajalic*

Trade-offs in Combining Domain-Specific and Generic Skills’ Practice in Minecraft in Social Studies in Teacher Education ....................... 44  
*Anders I. Mørch, Siv Eie and Louise Mifsud*

## Trade-offs in Communicating with Technology

Feelings Detection System – a Proposal ........................................ 53  
*Arminda Guerra Lopes, Ana Margarida Dias, Joana Salgueiro and Euruco Lopes*

Chatbots and Conversational Interfaces: Three Domains of Use .......... 62  
*Stefano Valtolina, Barbara Rita Barricelli, Serena Di Gaetano and Pietro Diliberto*

Mammy – a Technological Tool to Exchange Information ................... 71  
*Valeriya Khrebtova, Pedro Fonseca, Ana Margarida Dias and Arminda Guerra Lopes*

## Trade-offs in the Design of Smart Environments

An IoT Model for Coping with Trade-offs in Designing Smart Environments 80  
*Fabio Cassano and Antonio Piccinno*

‘Design for All’ versus ‘One-Size-Fits-All’: the Case of Cultural Heritage ... 89  
*Daniela Fogli and Alberto Arenghi*
Author Index

A
Arenghi, Alberto 89

B
Barricelli, Barbara Rita 62

C
Cassano, Fabio 80

D
Derboven, Jan 8
Di Gaetano, Serena 62
Dias, Ana Margarida 53, 71
Diliberto, Pietro 62

E
Eie, Siv 44
Elsrud, Marthe Nikoline 34

F
Ferron, Michela 15
Fischer, Gerhard 1
Fogli, Daniela 89
Fonseca, Pedro 71

G
Gennari, Rosella 21
Guerra Lopes, Arminda 53, 71

H
Herstad, Jo 34

K
Khrebtova, Valeriya 71

L
Lopes, Eurico 53

M
Mana, Nadia 15
Melonio, Alessandra 21
Mich, Ornella 15
Mifsud, Louise 44
Mørch, Anders I. 44

P
Pajalic, Zada 34
Piccinno, Antonio 80

S
Salgueiro, Joana 53
Saplacan, Diana 34
Schiavo, Gianluca 15
<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>U</strong></td>
<td>Ugur Yavuz, Secil</td>
<td>21</td>
</tr>
<tr>
<td><strong>V</strong></td>
<td>Valtolina, Stefano</td>
<td>62</td>
</tr>
</tbody>
</table>