

CENTRIC 2019

The Twelfth International Conference on Advances in Human oriented and Personalized Mechanisms, Technologies, and Services

November 24 - 28, 2019

Valencia, Spain

CENTRIC 2019 Editors

Stephan Böhm, RheinMain University of Applied Sciences - Wiesbaden, Germany Lasse Berntzen, University of South-Eastern Norway, Norway Sandra Sendra, Universidad de Granada, Spain Printed from e-media with permission by:

Curran Associates, Inc. 57 Morehouse Lane Red Hook, NY 12571



Some format issues inherent in the e-media version may also appear in this print version.

Copyright© (2019) by International Academy, Research, and Industry Association (IARIA) Please refer to the Copyright Information page.

Printed with permission by Curran Associates, Inc. (2020)

International Academy, Research, and Industry Association (IARIA) 412 Derby Way Wilmington, DE 19810

Phone: (408) 893-6407 Fax: (408) 527-6351

petre@iaria.org

Additional copies of this publication are available from:

Curran Associates, Inc. 57 Morehouse Lane Red Hook, NY 12571 USA Phone: 845-758-0400 Fax: 845-758-2633 Email: curran@proceedings.com Web: www.proceedings.com

Table of Contents

Enabling User Centered Distributed Stormwater Monitoring Julio Arauz and Amy Lynch	1
Infrastructure-as-Code for Scientific Computing Environments Daniel Gomes, Pedro Mestre, and Carlos Serodio	7
Difference in Attitudes Toward Suggestions Given by an Agent Using Impasse Estimation Yoshimasa Ohmoto, Hanako Sonobe, and Toyoaki Nishida	11
EEG Application for Human-Centered Experiments in Remote Ship Operations Raheleh Kari, Martin Steinert, and Henrique M.Gaspar	17
Designing Effective Advergame for Purchase Intention: A View of Game Design and Psychological State Wei-Hung Hsiao, Shwu-Ming Wu, and Ing-Long Wu	24
Mobile Enterprise Application Development in Practice: an Analysis of Real-World User Stories Matthias Jurisch, Stephan Bohm, and Toby James-Schulz	31
Motivational Features in an Application for Presenting Dysfunctional Movement Patterns and for Providing Support in Conducting Exercises Marie Sjolinder, Vasiliki Mylonopoulou, Anneli Avatare Nou, and Olli Korhonen	37
Enhanced System Usability Scale for Adaptive Courses Tansu Pancar, Matthias Holthaus, and Per Bergamin	43
Are you Lost?: Using Facial Recognition to Detect Customer Emotions in Retail Stores Valter Borges, Rui Duarte, Carlos Cunha, and David Mota	49
Assessing Management and Leadership of Work Communities – Related Concepts, Views and ICT-tools Seppo Vayrynen and Heli Kiema-Junes	55
A User-experience Driven SSIM-Aware Adaptation Approach for DASH Video Streaming Mustafa Othman, Ken Chen, and Anissa Mokraoui	61
Influence of Performance Expectancy, Experience and Perceived Risk on the Usage of Cryptocurrency Investments Erik Massarczyk, Peter Winzer, and Finn Jakob Muller	67
Personalizing Learning with m-Technologies to Improve Students Performance in South African Higher Learning	77

Refilwe Constance Mogase and Patricia Margaret Alexander