

Advances in Intelligent Systems and Computing

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Series editor

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The series “Advances in Intelligent Systems and Computing” contains publications on theory, applications, and design methods of Intelligent Systems and Intelligent Computing. Virtually all disciplines such as engineering, natural sciences, computer and information science, ICT, economics, business, e-commerce, environment, healthcare, life science are covered. The list of topics spans all the areas of modern intelligent systems and computing.

The publications within “Advances in Intelligent Systems and Computing” are primarily textbooks and proceedings of important conferences, symposia and congresses. They cover significant recent developments in the field, both of a foundational and applicable character. An important characteristic feature of the series is the short publication time and world-wide distribution. This permits a rapid and broad dissemination of research results.

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Preface

Education is the cornerstone of any society, and it serves as one of the foundations for many of its social values and characteristics. Knowledge societies offer significant opportunities for novel ICT tools and applications, especially in the fields of education and learning. In such a context, the role of intelligent systems, rooted in artificial intelligence, has become increasingly relevant to the field of technology-enhanced learning (TEL). New intelligent solutions can be stand-alone or interconnected to others. They can target not only cognitive processes but they can also take care of motivational factors. Furthermore, more recently, makerspaces have emerged as environments for learning, increasing the offer of formal and informal learning opportunities, also for “fragile users,” as, for example, children, elderly people, people with special needs.

The 7th edition of this conference expands the topics of the previous editions in order to provide its participants with an open forum for discussing intelligent systems for TEL, their roots in novel learning theories, empirical methodologies for their design or evaluation, stand-alone solutions or Web-based ones, and makerspace opportunities, also fostering entrepreneurship and increasing business start-up ideas. The conference intends to bring together researchers, educators, and developers from industry to discuss the latest scientific research, technical advances, and methodologies.

This volume presents all papers that were accepted at MIS4TEL 2017. All underwent a peer-review selection: Each paper was assessed by three different reviewers, from an international panel composed of about 50 members of 11 countries. The program of MIS4TEL counted 15 contributions from diverse countries, such as Brazil, Colombia, Italy, Mexico, Portugal, Romania, and Spain. The quality of papers was on average good, with an acceptance rate of approximately 70%.

This conference has grown across years in quality and visibility at the international level. As we like writing every year, that would not have been possible without the interest of MIS4TEL authors in the conference as well as the help of the Program Committee who assisted the editors in the review process for giving constructive feedback to all authors. Therefore, we would like to thank, once more, all the contributing authors, reviewers, and sponsors (IBM, Indra and IEEE SMC

Spain), as well as the Organizing Committee for their hard and highly valuable work. The work of all such people crucially contributed to the success of MIS4TEL'17 and to shape the future and practice of TEL research.

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Contents

Artificial Intelligent Technologies and Algorithms for TEL	
A Fuzzy-Based Multi-agent Model for Group Formation in Collaborative Learning Environments	3
Sebastián Torres, Oscar M. Salazar, and Demetrio A. Ovalle	
Using Large Margin Nearest Neighbor Regression Algorithm to Predict Student Grades Based on Social Media Traces	12
Florin Leon and Elvira Popescu	
Adaptive Agent-Based Environment Model to Enable the Teacher to Create an Adaptive Class.	20
Cecilia Giuffra Palomino, Carolina Schmitt Nunes, Ricardo Azambuja Silveira, Sara Rodríguez González, and Marina Keiko Nakayama	
Answer Identification Model for Methodological Question in Student Texts	28
Samuel González-López and Aurelio López-López	
The Design of a Smart Tray with Its Canteen Users: A Formative Study	36
Vincenzo Del Fatto, Rosella Gennari, Alessandra Melonio, and Guerriero Raimato	
Methodologies for the Design, Personalisation, User Modelling and Adaptation in TEL	
Assessing the Role of Computer Simulation in Chemistry Learning	47
Margarida Figueiredo, Catarina Rafael, José Neves, and Henrique Vicente	

Literature-Based Analysis of the Potentials and the Limitations of Using Simulation in Nursing Education	57
Cristina Petrucci, Carmen La Cerra, Valeria Caponnetto, Ilaria Franconi, Elona Gaxhja, Ivan Rubbi, and Loreto Lancia	
Use of Internet and Wellbeing: A Mixed-Device Survey	65
Daniela Raccanello, Roberto Burro, Margherita Brondino, and Margherita Pasini	
TEL Methodologies in Health Education. Effectiveness of a Group Educational Intervention in Patients with T2DM	74
Elena Martín González, María Serrano Galán, Jesús Martín González, and Angélica González Arrieta	
Psychology of Programming: The Role of Creativity, Empathy and Systemizing	82
Margherita Pasini, Ugo Solitro, Margherita Brondino, Roberto Burro, Daniela Raccanello, and Margherita Zorzi	
Analysis Learning Styles Though Attentiveness	90
Dalila Durães, Javier Bajo, and Paulo Novais	
Technology-Based Learning Experiences and Game-Based Learning Studies	
Toward a Cognitive Robotics Laboratory Based on a Technology Enhanced Learning Approach	101
Giovanni De Gasperis, Tania Di Mascio, and Laura Tarantino	
First Steps Towards the Design of Tangibles for Graph Algorithmic Thinking	110
Andrea Bonani, Vincenzo Del Fatto, Gabriella Dodero, Rosella Gennari, and Guerriero Raimato	
EOLo: A Serious Mobile Game to Support Learning Processes	118
Oscar M. Salazar, Santiago Álvarez, and Demetrio A. Ovalle	
SNIFF: A Game-Based Assessment and Training Tool for the Sense of Smell	126
Michela Ponticorvo, Fabrizio Ferrara, Raffale Di Fuccio, Andrea Di Ferdinando, and Orazio Miglino	
Author Index	135