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Challenges and Solutions in Smart Learning

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Preface

Smart learning environments are emerging as an offshoot of various technology-enhanced learning initiatives that have aimed over the years at improving learning experiences and outcomes by making learning more efficient through creating learning space and atmosphere that meet the individual needs of learners, while still enabling learners to access digital resources and interact with learning systems at the place and time of their choice.

The concept of what constitutes smart learning is still in its infancy, and the International Conference on Smart Learning Environments (ICSLE) is organized by the International Association on Smart Learning Environments and has emerged as the platform to bring together researchers, practitioners, and policy makers to discuss issues related to the optimization of learning environments to enhance learning. The focus is on the interplay of pedagogy, content knowledge, technology and their interactions and interdependencies towards the advancement of smart learning environments.

ICSLE will facilitate opportunities for discussions and constructive dialogue among various stakeholders on the limitations of existing learning environments, need for reform, innovative uses of emerging pedagogical approaches and technologies, and sharing and promotion of best practices, leading to the evolution, design and implementation of smart learning environments.

The focus of the contributions in this book is on the challenges and solutions in smart learning and smart learning environments that researchers have faced and proposed. Various components of this book include but are not limited to:

- Assessment and gamification in smart learning environments
- Innovative uses of emerging and existing technologies
- Learning analytics, technologies and tools to support smart learning environments.

ICSLE 2018 received 27 papers, with authors from 11 countries. All submissions were peer-reviewed in a double-blind review process by at least 3 Program Committee members. We are pleased to note that the quality of the submissions this year turned out to be very high. A total of 7 papers were accepted as full papers

(yielding a 25.93% acceptance rate). In addition, 5 papers were selected for presentation as short papers and another 4 as posters.

Furthermore, ICSLE 2018 features joint activities with US-China Smart Education Conference and presents 5 distinguished keynote presentations. A Smart Computing and Intelligence Summit is also included in the program. One workshop is also organized in conjunction with the main conference, with a total of 3 accepted papers (included at the end of this volume).

We acknowledge the invaluable assistance of the 42 Program Committee members from 22 countries, who provided timely and helpful reviews. We would also like to thank the entire Organizing Committee for their efforts and time spent to ensure the success of the conference. And last but not least, we would like to thank all the authors for their contribution in maintaining a high quality conference.

With all the effort that has gone into the process, by authors and reviewers, we are confident that this year's ICSLE proceedings will immediately earn a place as an indispensable overview of the state of the art and will have significant archival value in the longer term.

Edmonton, Canada
 Craiova, Romania
 Denton, USA
 Kaohsiung, Taiwan
 Tunis, Tunisia
 Beijing, China
 Denton, USA
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