The 18th edition the International Conference on Cognition and Exploratory Learning in Digital Age (CELDA 2021) was held virtually due to the COVID-19 pandemic, from 13 to 15 October 2021.

This conference was organized by the International Association for Development of the Information Society.

The CELDA conference tries to address the foremost issues of concern within the evolving learning processes and supporting pedagogies and applications in the digital age. There had been advances in both cognitive psychology and computing that have affected the educational arena. The convergence of these two disciplines is increasing at a fast pace and affecting academia and professional practice in many ways. Paradigms such as just-in-time learning, constructivism, student-centered learning and collaborative approaches have emerged and are being supported by technological advancements such as simulations, virtual reality and multi-agents systems. These developments have created both opportunities and areas of serious concerns. This event covered both technological as well as pedagogical issues related to these developments. Main topics have been identified. However innovative contributions that do not easily fit into these areas were also considered as long as they were directly related to the overall theme of the conference – cognition and exploratory learning in the digital age.

The CELDA 2021 Conference received 68 submissions from more than 21 countries. Each submission was reviewed in a double-blind review process by at least two independent reviewers to ensure quality and maintain high standards. Out of the papers submitted, 34 were accepted as full papers for an acceptance rate of 50%; 16 were accepted as short papers and 2 were accepted as reflection papers.

Authors of the best published papers in the proceedings of CELDA 2021 were invited to publish extended versions of their papers in:

- A book from Springer

In addition to the presentation of full, short and reflection papers, the conference also included one keynote presentation by Dr. David Scaradozzi, Department of Information Engineering, Università Politecnica delle Marche, Italy.

Keynote Presentation:

“IS ROBOTICS IN EDUCATION THE RIGHT TOOL TO FACE THE FUTURE PIVOTAL CHALLENGES OF SOCIETY?”

by David Scaradozzi, Department of Information Engineering, Università Politecnica delle Marche, Italy

The CELDA 2021 Book of Proceedings was published in hard copy by IADIS Press.
Editors: Demetrios G. Sampson, Dirk Ifenthaler and Pedro Isaías
Program Committee Members:

**Conference Chair**
Pedro Isaías, Information Systems & Technology Management School, The University of New South Wales, Australia

**Program Co-Chairs**
Demetrios G Sampson, University of Piraeus, Greece & Curtin University, Australia
Dirk Ifenthaler, University of Mannheim, Germany & Curtin University, Australia

**Committee Members**
Ah-Choo Koo, Multimedia University, Malaysia
Aike Martens, University of Rostock, Germany
Anthony Y. H. Liao, Asia University, Taiwan
Baltasar Fernandez-Manjon, Universidad Complutense de Madrid, Spain
Barbara Getto, Ph Zürich, Switzerland
Bettina Waffner, University of Duisburg-Essen, Germany
ChanMin Kim, Penn State University, USA
Charalampos Karagiannidis, University of Thessaly, Greece
Chien Sing Lee, Sunway University, Malaysia
Chun-Wang Wei, Kaohsiung Medical University, Taiwan
Daniel Otto, University of Duisburg-Essen, Germany
David Guralnick, Kaleidoscope Learning, USA
Davinia Hernandez-Leo, Universitat Pompeu Fabra, Spain
Farshad Badie, Aalborg University, Denmark
Flavio Manganello, National Research Council, Italy
George Siemens, University of Texas Arlington, Canada
Georgios Zacharis, Aristotle University of Thessaloniki, Greece
Giuliana Guazzaroni, MIUR, Italy
I-Fang Liu, National Central University, Taiwan
Imran Zulakernan, American University of Sharjah, United Arab Emirates
Jay Loftus, Michigan State University, USA
Jirarat Sitthiworachart, King Mongkut Institute of Technology Ladkrabang, Thailand
Juan Felipe Calderon, Universidad Andres Bello, Chile
Julie-Ann Sime, Lancaster University, United Kingdom
Katherine Sintsa, Int. Res. Training Center for Info. Tech. and Systems, Ukraine
Kuo-Liang Ou, National Tsing Hua University, Taiwan
Lence Miloseva, Goce Delcev University, Macedonia
Luis Anido, University of Vigo, Spain
Maiga Chang, Athabasca University, Canada
Michael Kerres, University of Duisburg-Essen, Germany
Michael Pollak, Graz University of Technology, Austria
Michail Kologiannakis, University of Crete, Greece
Ming-Chi Liu, Feng Chia University, Taiwan
Minjeong Kim, Dankook University, Republic of Korea
Monica Divitini, Norwegian University of Science and Technology, Norway
Muhittin Sahin, University of Mannheim, Germany
Ni Chang, Indiana University South Bend, USA
Patrick Blumschein, University of Education Freiburg, Germany
Patrick Jost, Norwegian University of Science and Technology, Norway
Radu Vasiu, Politehnica University of Timisoara, Romania
Richard Huntrods, Athabasca University, Canada
Sanghoon Park, University of South Florida, USA
Sofia Papavlasopoulou, Norwegian University of Science and Technology, Norway
Stamatios Papadakis, University of Crete, Greece
Tassos Mikropoulos, The University of Ioannina, Greece
Tobias Hoelterhof, Catholic University of Applied Sciences, Germany
Veronica Rossano, University of Bari, Italy
Vincent Barre, Le Mans University, France
Yen-Ting Lin, National Pingtung University, Taiwan