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ICT in Education, Research and Industrial Applications

Proceedings of the 14th International Conference, ICTERI 2018. Volume II: Workshops

Kyiv, Ukraine
May, 2018

This volume represents the proceedings of the Workshops co-located with the 14th International Conference on ICT in Education, Research, and Industrial Applications, held in Kyiv, Ukraine, in May 2018. It comprises 60 contributed papers that were carefully peer-reviewed and selected from 118 submissions for the five co-located workshops: ITER, TheRMIT, 3L-Person, RMSE, and DSEDU. The volume is structured in five parts, each presenting the contributions to a particular workshop. The topical scope of the volume is aligned with the thematic tracks of ICTERI 2018: (I) Advances in ICT Research; (II) Information Systems: Technology and Applications; (III) Academia/Industry ICT Cooperation; and (IV) ICT in Education.

Preface

It is our pleasure to present you the proceedings of the Workshops co-located with ICTERI 2018, the fourteenth edition of the International Conference on Information and Communication Technologies in Education, Research, and Industrial Applications, held in Kyiv (Ukraine) on May 14-17, 2018. This year's edition focused on research advances, information systems technologies and applications, business/academic applications of Information and Communication Technologies. Emphasis was also placed on the role of ICT in Education. These aspects of ICT research, development, technology transfer, and use in real world cases remain vibrant for both the academic and industrial communities. Overall, ICTERI 2018, including the Workshops, was focused on the four thematic tracks reflecting these research fields: (I) Advances in ICT Research; (II) Information Systems: Technology and Applications; (III) Academia/Industry ICT Cooperation; and (IV) ICT in Education.

This volume is structured in parts, each presenting the contributions to a particular workshop:

Part I: 6th International Workshop on Information Technologies in Economic Research (ITER 2018). This workshop focused on advancing research and also business/academic applications of information and communication technologies related to solving practical economic problems.

Part II: 3d International Workshop on Professional Retraining and Life-Long Learning, using ICT: Person-oriented Approach (3L-Person 2018). This workshop presented novel research issues and uses of information technology for life-long learning.

Part III: 4th International Workshop on Theory of Reliability and Markov Modelling for Information Technologies (TheRMIT 2018). This workshop addressed long-standing research and development aspects of reliability, security and safety modeling and assessment for modern IT systems.

Part IV: 2nd International Workshop on Rigorous Methods in Software Engineering (RMSE 2018). This workshop focused on the aspects of formal techniques for specification and analysis of distributed software and cyber-physical systems, computer simulation.

Part V: 1st International Workshop on Data Science EDUcation: Challenges, Opportunities and Trends (DSEDU 2018). This workshop discussed several important issues related to Data Science education: synergies with Computer Science curricula; appropriate education level; required entry knowledge; the consequences of data-driven decisions and related ethical issues; trends in Data Science as a profession.

Overall, ICTERI 2018 workshops attracted 118 paper submissions. Out of these submissions, the organizers have accepted 60 high quality and most interesting papers. So, the average acceptance rate was of 50.8 percent

These papers were published in the Volume II of ICTERI 2018 proceedings.

The conference and its co-located events would not have been possible without the support of many people. First of all, we would like to thank all the authors who submitted papers to the workshops of ICTERI 2018 and thus demonstrated their interest in the research problems within their scope. We are very grateful to the members of the Program Committees for providing timely and thorough reviews and, also, for being cooperative in doing additional review work. We would like to thank the local organizers of the conference whose devotion and efficiency made the constellation of ICTERI 2018 workshops a very interesting and effective scientific forum.

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