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Valentina Dagiene · Arto Hellas (Eds.)

Informatics in Schools

Focus on Learning Programming

10th International Conference on Informatics in Schools: Situation, Evolution, and Perspectives, ISSEP 2017
Helsinki, Finland, November 13–15, 2017
Proceedings

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Preface

The International Conference on Informatics in Schools: Situation, Evolution and Perspectives (ISSEP) celebrated its 10th anniversary in Helsinki, the capital of Finland. The year 2017 also marked the anniversary of Finland: One month after the conference, on December 6, Finland celebrated its 100th year of independence.

ISSEP is a forum for researchers and practitioners in the area of informatics education, in both primary and secondary schools. The conference provides an opportunity for educators and researchers to reflect upon the goals and objectives of this subject matter, its curricula, various teaching and learning paradigms and topics, as well as the connections to everyday life – including the various ways of developing informatics education in schools. This applies in an even larger extent to the didactics of informatics. ISSEP provides an opportunity to take stock of developments in the field and on the extent these developments are relevant for everyday school life.

This conference brings together delegates to address pressing issues in informatics education. On the basis of these challenging areas, participants consider how to cope with future demands of education in informatics and IT-related subjects. Teachers, those working in teacher education and in-service training as well as in school administration come to participate in workshops and to share their experience or vision on an international platform.

The ISSEP conference started in 2005 in Austria, Klagenfurt University (now Alpen-Adria University of Klagenfurt), where the conference was a part of the celebration of 20 years of teaching informatics in Austrian secondary schools. The following year, ISSEP took place in Vilnius, Lithuania, celebrating 20 years of informatics in Lithuanian secondary schools. The ISSEP conference expanded: In Vilnius there were over 200 researchers from 37 countries, and an additional day for local teachers was established and had over 250 attendants from all over Lithuania. In 2008, ISSEP was in Torun, Poland, and in 2010, ISSEP was organized in Zürich. Then followed Bratislava, Slovakia, in 2011, Oldenburg, Germany, in 2013, Istanbul, Turkey, in 2014, Ljubljana, Slovenia, in 2015 and Münster, Germany, in 2016.

In these proceedings, all research papers were blind reviewed by at least three reviewers. A final selection phase was conducted by the co-chairs who reviewed all reviews and recommendations before making their final decisions. From the 41 submitted articles, 18 were selected for presentation and inclusion in the proceedings.

This year, participants at ISSEP discussed a broad range of themes ranging from making informatics accessible to visually impaired students and computational thinking to context- and country-specific challenges as well as teacher development and training. The conference hosted several workshops where teachers and researchers were familiarized with, e.g., robotics and teaching programming as well as unplugged activities for computational thinking. Preliminary work and new ideas were presented

as posters, creating a unique opportunity for the participants to discuss the ideas in a supportive environment. ISSEP also hosted CSERC (Computer Science Education Research Conference) as a special track at the conference.

October 2017

Valentina Dagienė
Arto Hellas

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