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Andreas Bollin · Gerald Futschek (Eds.)

Informatics in Schools

A Step Beyond Digital Education

15th International Conference on Informatics in Schools: Situation, Evolution, and Perspectives, ISSEP 2022 Vienna, Austria, September 26–28, 2022 Proceedings



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Preface

This volume contains all the research, best practice, and country and experience reports presented at the 15th International Conference on Informatics in Schools: Situation, Evolution, and Perspectives (ISSEP 2022). The conference was held at TU Wien, Austria, during September 26–28, 2022, in cooperation with the University of Klagenfurt, Austria. Invitees included not only researchers in the field of computer science didactics but also computer scientists, teachers, stakeholders from industry, and staff from the Federal Ministry of Education, Science, and Research.

The conference series started in Klagenfurt, Austria, in 2005, when information and communication technologies were increasingly making their way into the classroom and beginning to displace traditional computer science teaching. In order to educate decision-makers, Roland Mittermeir initiated ISSEP, planned initially as a one-time international event. However, it did not stop there, and the ISSEP conference has so far taken place in Vilnius, Lithuania (2006), Torun, Poland (2008), Zurich, Switzerland (2010), Bratislava, Slovakia (2011), Oldenburg, Germany (2013), Istanbul, Republic of Türkiye (2014), Ljubljana, Slovenia (2015), Münster, Germany (2016), Helsinki, Finland (2017), St. Petersburg, Russia (2018), Larnaca, Cyprus (2019), Tallinn, Estonia (2020), and Nijmegen, The Netherlands (2021).

In the meantime, something very interesting is happening again in our school systems: subjects like "digital literacy" or "media literacy" are making their way in, complementing or partially replacing computer science education. The current ISSEP conference reacted to this trend and therefore invited computer scientists, media didactics, and representatives of politics and industry to a discussion round on the topic "Media Education or Computer Science? Quo Vadis, School Teaching?".

The conference makes an equally strong effort to promote young researchers, offering a Doctoral Consortium the day before the conference. In total, 11 Ph.D. students presented and discussed their research on September 25, 2022. They received assistance from international peers and introduced new ideas to their research careers.

The conference received a total of 57 submissions. Of these, 25 submissions were full papers, four short papers, eight workshop proposals, nine poster proposals, and 11 Doctoral Consortium topics. Each submission was reviewed in a double-blind review process and was evaluated, discussed, and selected by at least three reviewers together with the program chairs, except for the workshop proposals and the Doctoral Consortium where two to three reviewers reviewed and selected the topics. The reviewers selected 12 submissions for publication in the LNCS proceedings, resulting in an acceptance rate (for full research papers) of 48%. The decision process was performed electronically using the EasyChair conference management system.

Past ISSEP conferences attracted submissions on various computer science didactics/school teaching content. This year, too, there were contributions in many areas. However, the topics dealing with computational thinking, primary education, and Bebras tasks slightly outweighed the others. There were also contributions dealing with curricula and examples of school practice.

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Finally, we would like to thank everyone who made this conference possible: the authors with their submissions, the many members of the Program Committee who did a fantastic job, the sponsors, all the participants of the conference, and the local organization team.

September 2022

Andreas Bollin Gerald Futschek

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