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# Computer Science – Theory and Applications

Third International Computer Science Symposium  
in Russia, CSR 2008  
Moscow, Russia, June 7-12, 2008  
Proceedings

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# Preface

The Third International Computer Science Symposium in Russia (CSR-2008) was held during June 7–12, 2008 in Moscow, Russia, hosted by Dorodnicyn Computing Centre of Russian Academy of Sciences, Institute for System Programming of Russian Academy of Sciences, Moscow State University, Moscow Institute of Open Education, and Institute of New Technologies. It was the third event in the series of regular international meetings following CSR-2006 in St. Petersburg and CSR-2007 in Ekaterinburg.

The symposium was composed of two tracks: Theory and Applications/Technology. The opening lecture was given by Avi Wigderson and eight other invited plenary lectures were given by Eric Allender, Zurab Khasidashvili, Leonid Levin, Pavel Pudlák, Florin Spanachi, Limsoon Wong, Yuri Zhuravlev and Konstantin Rudakov, and Uri Zwick.

This volume contains the accepted papers of both tracks and also some of the abstracts of the invited speakers. The scope of the proposed topics for the symposium was quite broad and covered basically all areas of computer science and its applications. We received 103 papers in total. The Program Committee of the Theory Track selected 27 papers out of 62 submissions. The Program Committee of the Applications/Technology Track selected 6 papers out of 41 submissions.

Yandex provided Best Paper Awards; the recipients of these awards were selected by the Program Committee:

- Marius Zimand, “Two Sources Are Better Than One for Increasing the Kolmogorov Complexity of Infinite Sequences” — Best Paper Award for the Theory Track
- Laura Kovács, “Invariant Generation for P-solvable Loops with Assignments” — Best Paper Award for the Application/Technology Track
- Vladimir Podolskii, “A Uniform Lower Bound on Weights of Perceptrons” — Best Student Paper Award

The symposium featured two special sessions, “Andrei Muchnik. In Memoriam” and “Teaching Computer Science,” and one pre-conference workshop ACC 2008 (Russian-Indian Workshop on Algebra, Combinatorics and Complexity) organized by Meena Mahajan and Mikhail Volkov.

The reviewing process was organized using the EasyChair conference system, thanks to Andrei Voronkov.

We are grateful to our sponsors:

- Russian Foundation for Basic Research
- NIX Computer Company (hardware and software selling, system integration)
- Institute of New Technologies (INT, Russian leader of ICT in school education)

- Yandex (the largest Russian Internet portal providing key Web services)
- Microsoft Russia

We also thank a group of young Moscow computer scientists, headed by Yuri Pritykin, who significantly helped with local organizational issues.

March 2008

Edward A. Hirsch  
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