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Parallel Computational Technologies

11th International Conference, PCT 2017
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Revised Selected Papers

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Preface

This volume contains a selection of the papers presented at the 11th International Scientific Conference on Parallel Computational Technologies, PCT 2017, held during April 3–7, 2017, in Kazan, Russia.

The PCT series of conferences aims at providing an opportunity to discuss the future of parallel computing, as well as to report the results achieved by leading research groups in solving both scientific and practical issues using supercomputer technologies. The scope of the PCT series of conferences includes all aspects of high performance computing in science and technology such as applications, hardware and software, specialized languages, and packages.

The PCT series is organized by the Supercomputing Consortium of Russian Universities and the Federal Agency for Scientific Organizations. Originated in 2007 at the South Ural State University (Chelyabinsk, Russia), the PCT series of conferences has now become one of the most prestigious Russian scientific meetings on parallel programming and high-performance computing. PCT 2017 in Kazan continued the series after Chelyabinsk (2007), St. Petersburg (2008), Nizhny Novgorod (2009), Ufa (2010), Moscow (2011), Novosibirsk (2012), Chelyabinsk (2013), Rostov-on-Don (2014), Ekaterinburg (2015), and Arkhangelsk (2016).

All papers submitted to the conference were scrupulously evaluated by three reviewers on the relevance to the conference topics, scientific and practical contribution, experimental evaluation of the results, and presentation quality. PCT's Program Committee selected the 24 best papers to be included in this CCIS proceedings volume.

We would like to thank the Russian Foundation for Basic Research for their continued financial support of the PCT series of conferences, as well as respected PCT 2017 sponsors, namely platinum sponsors, Intel and RSC Group, gold sponsor, NVIDIA, silver sponsor, Hewlett Packard Enterprise, and track sponsor AMD.

We would like to express our gratitude to every individual who contributed to the success of PCT 2017. Special thanks to the Program Committee members and the external reviewers for evaluating papers submitted to the conference. Thanks also to Organizing Committee members and all the colleagues involved in the conference organization from Kazan Federal University, the South Ural State University, and Moscow State University. We thank the participants of PCT 2017 for sharing their research and presenting their achievements as well.

Finally, we thank Springer for publishing the proceedings of PCT 2017 in the Communications in Computer and Information Science series.

May 2017

Leonid Sokolinsky
Mikhail Zymbler

Organization

The 11th International Scientific Conference on Parallel Computational Technologies, PCT 2017, was organized by the Supercomputing Consortium of Russian Universities and the Federal Agency for Scientific Organizations, Russia.

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