

Lecture Notes in Computer Science
Edited by G. Goos, J. Hartmanis, and J. van Leeuwen

2244

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Perspectives of System Informatics

4th International
Andrei Ershov Memorial Conference, PSI 2001
Akademgorodok, Novosibirsk, Russia, July 2-6, 2001
Revised Papers



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Cataloging-in-Publication Data applied for

Die Deutsche Bibliothek - CIP-Einheitsaufnahme

Perspectives of system informatics : revised papers / 4th International
Andrei Ershov Memorial Conference, PSI 2001, Akademgorodok, Novosibirsk,
Russia, July 2 - 6, 2001. Dines Bjørner ... (ed.). - Berlin ; Heidelberg ;
New York ; Barcelona ; Hong Kong ; London ; Milan ; Paris ; Tokyo :
Springer, 2001
(Lecture notes in computer science ; Vol. 2244)
ISBN 3-540-43075-X

CR Subject Classification (1998): F.3, D.3, D.1, D.2, F.1

ISSN 0302-9743

ISBN 3-540-43075-X Springer-Verlag Berlin Heidelberg New York

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Springer-Verlag Berlin Heidelberg New York
a member of BertelsmannSpringer Science+Business Media GmbH

<http://www.springer.de>

© Springer-Verlag Berlin Heidelberg 2001
Printed in Germany

Typesetting: Camera-ready by author, data conversion by PTP-Berlin, Stefan Sossna
Printed on acid-free paper SPIN: 10845892 06/3142 5 4 3 2 1 0

Preface

This volume comprises the papers presented at the Fourth International Andrei Ershov Memorial Conference “Perspectives of System Informatics”, Akademgorodok (Novosibirsk, Russia), July 2–6, 2001. The main goal of the conference was to give an overview of research directions decisive for the growth of major areas of research activities in system informatics.

The conference was held to honor the 70th anniversary of the late Academician Andrei Ershov (1931–1988) and his outstanding contributions towards advancing informatics. It was the fourth conference in the line. The First International Conference “Perspectives of System Informatics” was held in Novosibirsk, Akademgorodok, May 27–30, 1991, the second one on June 25–28, 1996, the third one on July 6–9, 1999. The three conferences gathered a wide spectrum of specialists and were undoubtedly very successful.

The fourth conference included many subjects of the previous ones, such as theoretical computer science, programming methodology, and new information technologies, which are the most important components of system informatics. The style of the three previous conferences was preserved to a certain extent: a number of invited papers were presented in addition to contributed regular and short papers.

This time 73 papers were submitted to the conference by researchers from 19 countries. Each paper was reviewed by three experts, at least two of them from the same discipline as the authors or a closely related one. The reviewers generally provided high quality assessment of the papers and often gave extensive comments to the authors for the possible improvement of the presentation. As a result, the program committee selected 26 high quality papers as regular talks and 22 papers as short talks. Some hot topics in System Informatics were covered by four invited talks given by prominent computer scientists from different countries.

To celebrate the 70th anniversary of the late Academician A. P. Ershov, a special memorial session was organized. It included two invited talks and a number of short informal communications. The invited talks were given by two prominent Russian computer scientists who worked either side by side with A. P. Ershov or in a closely related area.

Andrei P. Ershov was a man for all seasons. He commanded universal respect and received affection all over the world. His view of programming was both a human one and a scientific one. He created at Akademgorodok a unique group of scientists – some now in far away regions of the world: a good example of “technology transfer”, although perhaps not one that too many people in Russia are happy about.

Many of his disciples and colleagues continue to work in the directions initiated or stimulated by him, at the A. P. Ershov Institute of Informatics Systems, which is the main organizer of the conference.

VI Preface

We are glad to express our gratitude to all the persons and organizations who contributed to the conference – to the sponsors for their moral, financial, and organizational support, and to the members of local Organizing Committee for their efforts towards making a success of this event. We are especially grateful to N. Cheremnykh for her selfless labor when preparing the conference.

July, 2001

D. Bjørner
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^{†1} Igor Shvetsov was a member of staff at the A.P. Ershov Institute of Informatics Systems, and an internationally known specialist in the field of constraint programming. He prematurely passed away in April 2001. Right up until the last days of his life, he took part in the work of the PSI 2001 Program Committee.

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Support from the following institutions is gratefully acknowledged:

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- Microsoft Research, UK
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