

Preface

This volume comprises the papers presented at the Third International Andrei Ershov Memorial Conference “Perspectives of System Informatics”, Akademgorodok (Novosibirsk, Russia), July 6–9, 1999. The main goal of the conference was to give an overview of research directions which are decisive for the growth of major areas of research activities in system informatics.

The conference was the third one in the line. The first and second international conferences “Perspectives of System Informatics” were held in Novosibirsk, Akademgorodok, in May, 1991, and June, 1996, respectively. Both conferences gathered a wide spectrum of specialists and were undoubtedly very successful.

The third conference included many of the subjects of the second conference, such as theoretical computer science, programming methodology, new information technologies, and the promising field of artificial intelligence — as important components of system informatics. The style of the second conference was preserved to a certain extent in that there were a considerable number of invited papers in addition to the contributed papers. However, posters were replaced by short talks mainly given by young researchers.

This time 73 papers were submitted to the conference by researchers from all continents. Each paper was reviewed by three experts, at least two of them from the same or a closely related discipline as the authors. The reviewers generally provided high quality assessments of the papers and often gave extensive comments to the authors for the possible improvement of the presentations. As a result, the program committee selected 27 high quality papers as regular talks and 17 papers as short talks. A broad range of “hot” topics in system informatics were covered by eight invited talks given by prominent computer scientists from different countries.

The conference, like the previous ones, was dedicated to the memory of A. P. Ershov, the real and recognized leader in Soviet (and Russian) informatics.

The late Academician 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. At Akademgorodok he created 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. The institute was the main organizer of the three conferences.

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 the local organizing committee for their mutual efforts towards the success of this event. We are especially grateful to N. Cheremnykh for her selfless labour when preparing the conference.

October, 1999

D. Bjørner,
M. Broy,
A. Zamulin

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