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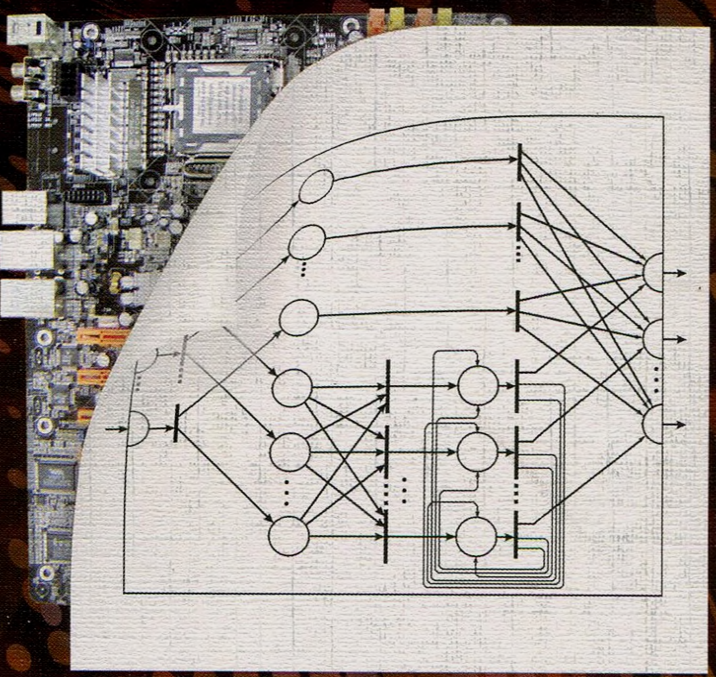
FORMAL MEANS OF THE SIMULATION OF PARALLEL PROCESSES AND SYSTEMS

B.B. NESTERENKO, M.A. NOVOTARSKYI



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FORMAL MEANS OF THE SIMULATION OF PARALLEL PROCESSES AND SYSTEMS

B.B. NESTERENKO, M.A. NOVOTARSKYI

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The book is devoted to problems of the mathematical simulation of complicated systems and processes that include problems of the development of the means of formalization that are able to ensure a sufficient level of similarity of mathematical models under condition of their efficient realization on modem computing facilities.

For the construction of the modem mathematical models of complicated systems and processes, it is proposed to use APRO-nets. For the analytic description of complicated systems and processes, the process algebra that allows one to create models with real workload is proposed. The sample of formal description of a computing environment for the simulation of complicated systems and processes in cluster systems is presented.

This book can be useful to scientists, engineers and students in the field of computer simulation.

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