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Xin He · En Shao · Guangming Tan (Eds.)

Network and Parallel Computing

17th IFIP WG 10.3 International Conference, NPC 2020
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Revised Selected Papers

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Preface

These proceedings contain the papers presented at the 17th IFIP International Conference on Network and Parallel Computing (NPC 2020), held in Zhengzhou, Henan, China, during September 28–30, 2020. The goal of the conference series is to establish an international forum for engineers and scientists to present their excellent ideas and experiences in system fields of distributed and parallel computing.

A total of 95 submissions were received in response to our call for papers. These papers originated from Asia (China and Japan), Africa, and North America (USA). Each submission was sent to at least three reviewers. Each paper was judged according to its originality, innovation, readability, and relevance to the expected audience. Based on the reviews received, 34 full papers (about 35%), comprising 12 papers published as Special Issue papers in the *International Journal of Parallel Programming* and 22 papers published as LNCS proceedings, were retained. A number of strong papers that could not be accepted to the full-paper track were considered for the short-paper track. Finally, we selected seven short papers. These papers cover traditional areas of network and parallel computing, including parallel applications, distributed algorithms, parallel architectures, software environments, and distributed tools.

We share the view that, during the past decade, the tools and cultures of high-performance computing and big data analytics are diverging to the detriment of both, and the international community should find a unified path that can best serve the needs of a broad spectrum of major application areas. Unlike other tools, which are limited to particular scientific domains, computational modeling and data analytics are applicable to all areas of science and engineering, as they breathe life into the underlying mathematics of scientific models. We sincerely appreciate the work and effort of the authors in preparing their submissions for review, and addressing the reviewer' comments before submitting the camera-ready copies of their accepted papers, and attending the conference to present and discuss their work. We also want to thank every member of the NPC 2020 Organizing Committee and Steering Committee for their help in putting together such an exciting program. Finally, we thank all the attendees.

September 2020

Xin He

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