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Euro-Par 2018: Parallel Processing Workshops

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Turin, Italy, August 27–28, 2018
Revised Selected Papers

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Preface

Euro-Par is an annual, international conference in Europe, covering all aspects of parallel and distributed processing. These range from theory to practice, from small to the largest parallel and distributed systems and infrastructures, from fundamental computational problems to full-fledged applications, from architecture, compiler, language and interface design and implementation to tools, support infrastructures, and application performance aspects. The Euro-Par conference itself is complemented by a workshop program, where workshops dedicated to more specialized themes, to cross-cutting issues, and to upcoming trends and paradigms can be easily and conveniently organized with little administrative overhead.

This year, 12 workshop proposals were submitted, and after a careful revision process, which was led by the workshop co-chairs, all of them were accepted.

The workshops took place on the two days before the Euro-Par conference and the program included the following 12 workshops:

1. Workshop on Autonomic Solutions for Parallel and Distributed Data Stream Processing (AUTO-DASP)
2. Workshop on Container-Based Systems for Big Data, Distributed, and Parallel Computing (CBDP)
3. Workshop on Data Locality (COLOC)
4. Workshop on Parallel and Distributed Computing Education for Undergraduate Students (EURO-EDUPAR)
5. Workshop on Fog-to-Cloud Distributed Processing (F2C-DP)
6. Workshop on Future Perspective of Decentralized Applications (FPDAPP)
7. Workshop on Algorithms, Models, and Tools for Parallel Computing on Heterogeneous Platforms (HETEROPAR)
8. Workshop on Large-Scale Distributed Virtual Environments (LSDVE)
9. Workshop on Advances in High-Performance Bioinformatics, Systems Biology (MED-HPC)
10. Workshop on Parallel and Distributed Computing for Life Sciences: Algorithms, Methodologies, and Tools (PDCLIFES)
11. Workshop on Reengineering for Parallelism in Heterogeneous Parallel Platforms (REPARA)
12. Workshop on Resiliency in High Performance Computing with Clouds, Grids, and Clusters (RESILIENCE)

All workshops together received a total of 109 submissions from 40 different countries. Each workshop had an independent Program Committee, which was in charge of selecting the papers. The workshop papers received more than three reviews per paper on average (361 reviews in total). Out of the 109 submissions, 65 papers were selected to be presented at the workshops. One of the accepted papers was not included in the final proceedings because the authors decided to withdraw it. Thus, the acceptance rate was 58%.

The success of the Euro-Par workshops depends on the work of many individuals and organizations. We therefore thank all workshop organizers and reviewers for the time and effort that they invested. We would also like to express our gratitude to the members of the Organizing Committee and the local staff, especially the volunteer PhD students, who helped us. Sincere thanks are due to Springer for their help in publishing the proceedings.

Lastly, we thank all participants, panelists, and keynote speakers of the Euro-Par workshops for their contribution to a productive meeting. It was a pleasure to organize and host the Euro-Par workshops 2018 in Turin.

September 2018

Gabriele Mencagli
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