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Euro-Par 2021: Parallel Processing Workshops

Euro-Par 2021 International Workshops
Lisbon, Portugal, August 30–31, 2021
Revised Selected Papers

Springer

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Preface

The International European Conference on Parallel and Distributed Computing (Euro-Par) is an annual, international conference in Europe, which covers 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. It also covers architecture, compiler, language, and interface design and implementation, as well as tools, support infrastructures, and application performance aspects.

The Euro-Par conference 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. In addition to workshops, the first edition of the Euro-Par PhD Symposium was also organized at the Euro-Par 2021 conference, with the aim at gathering PhD students in broadly defined areas related to parallel and distributed processing.

The 27th Euro-Par Workshops and PhD Symposium were held in Portugal during August 30–31, 2021, following the well-established format of its predecessors. The events were organized with the support of INESC-ID and Instituto Superior Técnico (Técnico Lisboa) – the Faculty of Engineering of the University of Lisbon. Although Euro-Par 2021 had been planned to take place in Lisbon, Portugal, it was organized as a virtual conference, as a result of the COVID-19 pandemic.

Overall, eleven workshop proposals were submitted. The following seven workshops were co-located with the Euro-Par 2021 edition, namely:

1. Workshop on Data Locality (COLOC)
2. Workshop on Algorithms, Models and Tools for Parallel Computing on Heterogeneous Platforms (HeteroPar)
3. Workshop on Future Perspectives of Decentralized Applications (FPDAPP)
4. Workshop on Resiliency in High Performance Computing in Clouds, Grids, and Clusters (Resilience)
5. Workshop on Parallel Programming Models in High-Performance Cloud (ParaMo)
6. Workshop on Large Scale Distributed Virtual Environments (LSDVE 2021)
7. Workshop on Asynchronous Many-Task systems for Exascale (AMTE)

After a careful revision process, and from a total of 67 submitted workshop papers, 39 papers were accepted, resulting on an acceptance rate of 58%. Each workshop had an independent program committee, which was responsible for selecting the papers. The workshop papers received more than three reviews per paper on average.

The Euro-Par PhD Symposium received 12 submissions from 10 countries, with each submission reviewed by at least three technical program committee members of the Euro-Par PhD Symposium. After the thorough peer-reviewing process, 10 submissions were accepted for presentation at the Euro-Par 2021 PhD Symposium, which are also included as extended abstracts in these proceedings.

In addition to the technical program, we had the pleasure of hosting two keynotes held by:

- Chuck Yoo, Korea University, South Korea
- Attila Kertesz, University of Szeged, Hungary

This volume contains the papers and extended abstracts presented at Euro-Par 2021 Workshops and PhD Symposium, divided into 8 track sections (corresponding to each of the workshops and PhD Symposium).

The success of the Euro-Par Workshops and PhD Symposium depends on the work of many individuals and organizations. We therefore thank all the organizers and reviewers for the time and effort that they invested. We would also like to express our gratitude to the members of the Euro-Par 2021 Organizing Committee and the local staff. Lastly, we thank all participants, panelists, and keynote speakers of the Euro-Par Workshops and PhD Symposium for their contribution to a productive meeting. It was a pleasure to organize and host the Euro-Par Workshops and PhD Symposium 2021 in Lisbon.

August 2021

Ricardo Chaves
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