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Juan Luis Crespo-Mariño ·
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High Performance Computing

6th Latin American Conference, CARLA 2019
Turrialba, Costa Rica, September 25–27, 2019
Revised Selected Papers



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Editors

Juan Luis Crespo-Mariño 
Costa Rica Institute of Technology
Cartago, Costa Rica

Esteban Meneses-Rojas
Costa Rica Institute of Technology
Cartago, Costa Rica

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Preface

The use and development of high performance computing (HPC) in Latin America is steadily growing. New challenges come from the capabilities provided by clusters, grids, and distributed systems for HPC, promoting research and innovation in many scientific disciplines. Building on the great success of the previous editions, the 6th Latin American Conference on High Performance Computing (CARLA 2019) was held in Turrialba, Costa Rica, during September 25–27, 2019. The main goal of CARLA 2019 was to provide a regional forum to foster the growth of the HPC community in Latin America through the exchange and dissemination of new ideas, techniques, and research projects. This edition also had a new element: the special track on Bioinspired Processing (BIP). It constituted the evidence of the growing crossover between HPC sciences and both theoretical and applied nature-related disciplines. The conference featured invited talks from academia and industry in the form of short- and full-paper sessions, presenting both mature work and new ideas in research and industrial applications.

The list of topics included, among others: Parallel Algorithms-Multicore Architectures and Accelerators, Parallel Programming Techniques-Grid, Cloud and Edge Computing, HPC Education and Outreach, HPC Infrastructure and Datacenters, Large-scale Distributed Systems-Scientific and Industrial Computing, HPC Applications and Tools, Biodiversity Informatics (application of ICT to biodiversity conservation), Ambient Computing, Visual Analytics for Biological Information, Ecoinformatics, Healthcare Informatics, Pattern Recognition for Biological and Related Signals, Bioinformatics, Biocomputing, and Computational Systems Biology.

All submitted papers were carefully examined by at least three reviewers. Out of the 62 submissions received, 32 were accepted to be presented at the conference.

September 2019

Juan Luis Crespo-Mariño
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