

Preface

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High Performance Computing is deserving great attention our region. Besides classical areas like High Performance Computing, clusters and Grids, the more recent Cloud Computing and distributed systems in general are subject of many research efforts. These new challenges coming from the use of different systems for HPC, help to promote the research and innovation in this area.

The High Performance Symposium was a track of Argentinean Conference of Informatics, JAIIO since 2009 until 2011. In 2012 took place in Buenos Aires the Latin American Symposium on High Performance Computing that include three major events: the V HPCLatAm2012 International Symposium, the High Performance Computing School (ECAR 2012), and the HPC day within the 41st Argentinean Conference of Informatics (41 JAIIO). This format was successfully followed during the VI HPCLatAm Symposium that took place at Mendoza City in Argentina from July 22 until July 30.

The HPCLatAm International Symposium provides a regional forum fostering the growth of the HPC community in Latin America through the exchange and dissemination of new ideas, techniques, and research in High Performance Computing. The symposium featured invited talks from academy and industry, short- and full-paper sessions presenting both mature work and new ideas in research and industrial applications. The submitted articles presented new valuable contributions in the areas of Parallel Algorithms and Architectures, High Performance Applications, Tools and Environments for High Performance System Engineering, Graphics Processing Units in High Performance Computing, Cloud, Grid and distributed Computing, and Parallelism and Data Sharing on Multi-core Architectures, among others.

It is important to point out that attendants to HPCLatAm 2013 come from our region and Europe as well. In this sense several communications have been authored by researchers from different countries for instance.

This Special Issue of CLEI Electronic Journal presents the invited contributions selected from the best evaluated papers presented in VI HPCLatAm 2013. These communications that have been conveniently extended and properly evaluated. In this way the selected papers are a valuable contributions to the development of high performance computing in Latin America and summarizes the state of the art of HPC in our region.

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