INTENSIVE 2013

Foreword

The Fifth International Conference on Resource Intensive Applications and Services [INTENSIVE 2013], held between March 24 - 29, 2013 in Lisbon, Portugal, continued a series of international events covering a spectrum of topics related to technologies, hardware, software and mechanisms supporting intensive applications and services (RIAS).

Intensiveness is a qualitative concept of expressing the degree of resources needed to fulfill a given task under strong requirements of either communication, computation, storage or simply data-volume where solutions are time-critical or have a mass impact. The well-known computation/resource intensive paradigm portrays a paradigm shift with the advent of high-speed applications, on-line multi-user game services, Grid applications and services, or on-demand resources and services. With the heavy distributed and parallel applications, communication intensive aspects, such as bandwidth-intensive and propagation intensive, became key contributors for optimizing workflows of computation of intensive tasks, or storage and access-intensive applications. For example, the massive scalability and storage capacity make it the clear choice for replication-intensive scenarios; the bandwidth-intensive becomes relevant for content streaming systems, while replication and data reuse are important for data-intensive applications on Grids.

There are monitoring and control aspects related to intensive applications and services aligned to different technologies. To deal with performance, scalability, stability, and accuracy (as some aspects may be NP-complete), different mechanisms and solutions were considered in terms of heuristics for relaxing the intensiveness, optimization, approximation or suboptimal solutions.

Associated with scalability, digital signal processors for computation intensive statistics and simulation relate to new hardware and software supporting the concept of ‘intensive’. Other technologies requiring real-time decoding, mobility, and wireless make the systems computationally very intensive. Performance intensive software is increasingly being used on heterogeneous combinations of OS, compiler, and hardware platforms.

We take here the opportunity to warmly thank all the members of the INTENSIVE 2013 Technical Program Committee, as well as the numerous reviewers. We also kindly thank all the authors who dedicated much of their time and efforts to contribute to INTENSIVE 2013. We truly believe that, thanks to all these efforts, the final conference program consisted of top quality contributions.

We are grateful to the members of the INTENSIVE 2013 organizing committee for their help in handling the logistics and for their work to make this professional meeting a success.

We hope that INTENSIVE 2013 was a successful international forum for the exchange of ideas and results between academia and industry and for the promotion of progress for resource intensive applications and services.

We are convinced that the participants found the event useful and communications very open. We also hope the attendees enjoyed the charm of Lisbon, Portugal.

INTENSIVE 2013 Chairs:

Chih-Cheng Hung, Southern Polytechnic State University, USA
Rainer Schmidt, Austrian Institute of Technology, Austria
Simon Tsang, Applied Communication Sciences, USA
Ouri Wolfson, University of Illinois - Chicago, USA
Alvaro Arenas, IE Business School, Spain
Kaustubh Joshi, AT&T Labs Research - Florham Park, USA
Meikel Poess, Oracle, USA
Arun Saha, Fujitsu Network Communications, USA