HPC4BD 2015 Foreword

Welcome to the 2nd International Workshop on High-Performance Computing for Big Data (HPC4BD), held in conjunction with the 44th International Conference on Parallel Processing (ICPP 2015).

Processing large datasets for extracting information and knowledge has always been a fundamental problem. Today this problem is further exacerbated, because the data a researcher or a company needs to cope with can be immense in terms of volume, widely distributed in terms of location, and unstructured in terms of format. Recent advances in computer hardware and storage technologies have allowed us to gather, store, and analyze such large-scale data. However, without scalable and cost-effective algorithms that utilize the resources in an efficient way, neither the resources nor the data itself can serve science and society to their full potential.

Analyzing big data requires a vast amount of storage and computing resources. We need to untangle the big, puzzling information we have and while doing this, we need to be fast and robust—the information we need may be crucial to a life or death situation. We need to be accurate—a single piece of misleading information extracted from the data can cause an avalanche effect. Each problem has its own characteristics and priorities. Hence, the best algorithm and architecture combination is different for different applications.

This workshop is designed to bring together people who work on data-intensive and high-performance computing in industry, research labs, and academia so they can share the problems posed by big data in various application domains and research the knowledge required to solve them.

We thank all the authors for submitting their high-quality work to HPC4BD. We also thank the Program Committee members. Their reviews helped a lot during the competitive paper selection process. This year's program consists of three refereed paper presentations.

Last but not least, we thank to ICPP Workshop Chairs Anne Benoit and Wenguang Chen for their help, which made the organization tasks easier for us.

Warm regards,

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