INFOCOMP 2015

Foreword

The Fifth International Conference on Advanced Communications and Computation (INFOCOMP 2015), held between June 21-26, 2015, in Brussels, Belgium, continued a series of events dedicated to advanced communications and computing aspects, covering academic and industrial achievements and visions.

The diversity of semantics of data, context gathering and processing led to complex mechanisms for applications requiring special communication and computation support in terms of volume of data, processing speed, context variety, etc. The new computation paradigms and communications technologies are now driven by the needs for fast processing and requirements from data-intensive applications and domain-oriented applications (medicine, geo-informatics, climatology, remote learning, education, large scale digital libraries, social networks, etc.). Mobility, ubiquity, multicast, multi-access networks, data centers, cloud computing are now forming the spectrum of de factor approaches in response to the diversity of user demands and applications. In parallel, measurements control and management (self-management) of such environments evolved to deal with new complex situations.

INFOCOMP 2015 also featured the following Symposium

EMPIRICAL MODELING 2015: The International Symposium on Empirical Modeling

We take here the opportunity to warmly thank all the members of the INFOCOMP 2015 Technical Program Committee, as well as the numerous reviewers. The creation of such a broad and high quality conference program would not have been possible without their involvement. We also kindly thank all the authors who dedicated much of their time and efforts to contribute to INFOCOMP 2015. We truly believe that, thanks to all these efforts, the final conference program consisted of top quality contributions.

Also, this event could not have been a reality without the support of many individuals, organizations, and sponsors. We are grateful to the members of the INFOCOMP 2015 organizing committee for their help in handling the logistics and for their work to make this professional meeting a success.

We hope that INFOCOMP 2015 was a successful international forum for the exchange of ideas and results between academia and industry and for the promotion of progress in the areas of communications and computations.

We are convinced that the participants found the event useful and communications very open. We hope that Brussels, Belgium, provided a pleasant environment during the conference and everyone saved some time to enjoy the charm of the city.

INFOCOMP 2015 Chairs:

INFOCOMP General Chair

Claus-Peter Rückemann, Westfälische Wilhelms-Universität Münster / Leibniz Universität Hannover / North-German Supercomputing Alliance, Germany

INFOCOMP Advisory Chairs

Hans-Joachim Bungartz, Technische Universität München (TUM) - Garching, Germany Petre Dini, Concordia University - Montreal, Canada / China Space Agency Center - Beijing, China Sik Lee, Supercomputing Center / Korea Institute of Science and Technology Information (KISTI), Korea Subhash Saini, NASA, USA Manfred Krafczyk, Institute for Computational Modeling in Civil Engineering (iRMB) - Braunschweig, Germany Ian Flood, University of Florida, USA

INFOCOMP Academia Chairs

Alexander Knapp, Universität Augsburg, Germany Malgorzata Pankowska, University of Economics, Katowice, Poland

INFOCOMP Research Institute Liaison Chairs

Kei Davis, Los Alamos National Laboratory, USA Edgar A. Leon, Lawrence Livermore National Laboratory, USA Ivor Spence, School of Electronics, Electrical Engineering and Computer Science, Queen's University Belfast, Northern Ireland, Research for High Performance and Distributed Computing / Queen's University Belfast, UK

INFOCOMP Industry Chairs

Alfred Geiger, T-Systems Solutions for Research GmbH, Germany Hans-Günther Müller, Cray, Germany

INFOCOMP Special Area Chairs on Large Scale and Fast Computation

José Gracia, High Performance Computing Center Stuttgart (HLRS), University of Stuttgart, Germany Björn Hagemeier, Juelich Supercomputing Centre, Forschungszentrum Juelich GmbH, Germany Walter Lioen, SURFsara, Netherlands Lutz Schubert, Institute of Information Resource Management, University of Ulm, Germany

INFOCOMP Special Area Chairs on Networks and Communications

Noelia Correia, University of the Algarve, Portugal Wolfgang Hommel, Leibniz Supercomputing Centre - Munich, Germany

INFOCOMP Special Area Chairs on Advanced Applications

Bernhard Bandow, Max Planck Institute for Solar System Research (MPS), Göttingen, Germany Diglio A. Simoni, RTI International - Research Triangle Park, USA

INFOCOMP Special Area Chairs on Evaluation Context

Huong Ha, University of Newcastle, Australia (Singapore campus) Philipp Kremer, German Aerospace Center (DLR), Institute of Robotics and Mechatronics, Oberpfaffenhofen, Germany

INFOCOMP Special Area Chairs on Biometry

Ulrich Norbisrath, Nazarbayev University, Kazakhstan / BIOMETRY.com, Switzerland