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# Distributed Applications and Interoperable Systems

6th IFIP WG 6.1 International Conference, DAIS 2006 Bologna, Italy, June 14-16, 2006 Proceedings



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## **Preface**

This volume contains the proceedings of the IFIP WG 6.1 International Working Conference on Distributed Applications and Interoperable Systems VI held in Bologna, Italy, on June 14-16, 2006.

The conference program presents the state of the art in research on distributed and interoperable systems. In recent years, distributed applications have indeed gained a practical and widely-known footing in everyday computing. Use of new communication technologies have brought up divergent application areas, including mobile computing, inter-enterprise collaborations, and ubiquitous services, just to name a few. New challenges include the need for service-oriented architectures, autonomous and self-managing systems, peer-to-peer systems, grid computing, sensor networks, semantic enhancements, and adaptivity and dynamism of distribution constellations.

Following the evolution of the field, DAIS 2006 focuses on architectures, models, technologies and platforms for interoperable, scalable and adaptable systems that are related to the latest trends towards service orientation and self-\* properties. The papers presented at DAIS 2006 cover methodological aspects, tools and language of building adaptable distributed and interoperable services, fault tolerance and dependability, peer-to-peer systems, mobility issues, web services applications and performance issues and composition, semantic web and semantic integration, and context- and location-aware applications. Also included in these proceedings is an invited paper by Jan Bosch and colleagues (Nokia Research Center, Finland) addressing the apparent conflict between usability and the architectural drivers that drive success or failure of mobile services.

This year, the technical program of DAIS drew from 99 submitted papers, among which 10 were explicitly submitted as work-in-progress papers. From these 21 regular and 5 work-in-progress papers were selected for inclusion in the proceedings. As a rule, each paper was reviewed by three reviewers. The DAIS 2006 conference was sponsored by IFIP (International Federation for Information Processing), and it was the sixth conference in the DAIS series of events organized by the IFIP Working Group 6.1. The previous conferences in this series took place in Cottbus, Germany (1997), Helsinki, Finland (1999), Krakow, Poland (2001), Paris, France (2003), and Athens, Greece (2005). Since Paris, DAIS has been organized in conjunction with the FMOODS conference (Formal Methods and Open Object-Based Distributed Systems). This time the COOR-DINATION conference (Conference on Coordination Models and Languages) joined the federated event of DAIS and FMOODS.

Finally, we would like to take this opportunity to thank the numerous people whose work made this conference possible. We wish to express our deepest gratitude to the authors of submitted papers, to all program committee members for their active participation in the paper review process, to all external reviewers

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for their help in evaluating submissions, to the University of Bologna for hosting the event, and to Gianluigi Zavattaro for acting as a general chair of the joint event, who also provided the Conference Management System and support. Ketil Lund took care of the publicity for the event. The Steering Committee with Lea Kutvonen, Hartmut König, Kurt Geihs, and Elie Najm extended their helping hand for making DAIS 2006 a successful conference.

June 2006

Frank Eliassen and Alberto Montresor

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