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# Distributed Applications and Interoperable Systems

8th IFIP WG 6.1 International Conference, DAIS 2008  
Oslo, Norway, June 4-6, 2008  
Proceedings

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# Preface

This volume contains the proceedings of DAIS 2008, the 8th IFIP International Conference on Distributed Applications and Interoperable Systems. The conference was held in Oslo, Norway during June 4–6, 2008 as part of the DisCoTec (Distributed Object Techniques) federated conference, in conjunction with the 10th International Conference on Coordination Models and Languages (COORDINATION) and the 10th IFIP International Conference on Formal Methods for Open Object-Based Distributed Systems (FMOODS). The conference was sponsored by IFIP (International Federation for Information Processing) and was organized by the IFIP Working Group 6.1.

Distributed applications and interoperable systems have become an integral part of everyday living and hence part of the socio-economic ecosystem of our human environment. With such pervasive distribution of software systems across a multitude of heterogeneous environments and user domains, distributed applications must support seamless provision of services, as well as service evolution and adaptability to ensure long-term sustainability. This support must go beyond the provision of individual services in isolation, towards systems in which such services can interoperate and be integrated into the everyday environment catering for the changing needs of their users.

The conference papers aimed to address the following questions:

- How can our distributed applications integrate into global environments?
- How do we ensure the seamless provision of services in these global environments?
- How do we make our interoperable systems adaptable and evolvable in the face of widespread changes to their environments?
- How can distributed applications and interoperable systems capitalize and exploit future trends and the changing user demographic?

The conference program comprised research contributions addressing service orientation issues; quality of service (QoS) management and composition in service-oriented architectures; dependability and reliability issues for Web services, distributed real-time embedded issues, component-based systems and distributed applications; analysis and management of peer-to-peer overlays; the challenges of pervasive computing systems; dynamic adaptation in smart environments, peer-to-peer systems and Web services; model-driven design, development and instrumentation; protocols and interactions for components, Web services and gossip-based systems. This year, the technical program of DAIS drew from 66 submissions, accepting for presentation 19 research papers and 5 work-in-progress papers. All submitted papers were reviewed by at least three reviewers, coordinated by our International Program Committee. The conference program also included three keynote addresses, in conjunction with the

other two DisCoTec conferences, from Alexander L. Wolf, Professor at the Department of Computing, Imperial College London, titled “New Uses of Simulation in Distributed Systems Engineering,” Matt Welsh, Associate Professor of Computer Science at the School of Engineering and Applied Sciences, Harvard University, titled “Fiji: A Platform for Data-Intensive Sensor Network Applications,” and Andrew Myers, Associate Professor at the Department of Computer Science, Cornell University, titled “Guiding Distributed Systems Synthesis with Language-Based Security Policies.”

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 and external reviewers for their participation in the paper review process, to Hartmut König for publicity, to the DAIS Steering Committee for their advice, to the University of Oslo for hosting DisCoTec, and to Frank Eliassen and Einar Broch Johnsen for acting as the General Chairs of DisCoTec.

June 2008

René Meier  
Sotirios Terzis

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