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# Distributed Applications and Interoperable Systems

15th IFIP WG 6.1 International Conference, DAIS 2015 Held as Part of the 10th International Federated Conference on Distributed Computing Techniques, DisCoTec 2015 Grenoble, France, June 2–4, 2015 Proceedings



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#### **Foreword**

The 10th International Federated Conference on Distributed Compting Techniques (DisCoTec) took place in Montbonnot, near Grenoble, France, during June 2–5, 2015. It was hosted and organized by Inria, the French National Research Institute in Computer Science and Control. The DisCoTec series is one of the major events sponsored by the International Federation for Information Processing (IFIP). It comprises three conferences:

- COORDINATION, the IFIP WG6.1 International Conference on Coordination Models and Languages.
- DAIS, the IFIP WG6.1 International Conference on Distributed Applications and Interoperable Systems.
- FORTE, the IFIP WG6.1 International Conference on Formal Techniques for Distributed Objects, Components and Systems.

Together, these conferences cover a broad spectrum of distributed computing subjects, ranging from theoretical foundations and formal description techniques to systems research issues.

Each day of the federated event began with a plenary keynote speaker nominated by one of the conferences. The three invited speakers were Alois Ferscha (Johannes Kepler Universität, Linz, Austria), Leslie Lamport (Microsoft Research, USA), and Willy Zwaenepoel (EPFL, Lausanne, Switzerland).

Associated with the federated event were also three satellite workshops, that took place on June 5, 2015:

- The 2nd International Workshop on Formal Reasoning in Distributed Algorithms (FRIDA), with a keynote speech by Leslie Lamport (Microsoft Research, USA).
- The 8th International Workshop on Interaction and Concurrency Experience (ICE), with keynote lectures by Jade Alglave (University College London, UK) and Steve Ross-Talbot (ZDLC, Cognizant Technology Solutions, London, UK).
- The 2nd International Workshop on Meta Models for Process Languages (MeMo).

Sincere thanks go to the chairs and members of the Program and Steering Committees of the involved conferences and workshops for their highly appreciated efforts. Organizing DisCoTec was only possible thanks to the dedicated work of the Organizing Committee from Inria Grenoble-Rhône-Alpes, including Sophie Azzaro, Vanessa Peregrin, Martine Consigney, Alain Kersaudy, Sophie Quinton, Jean-Bernard Stefani, and the excellent support from Catherine Nuel and the people at Insight Outside. Finally, many thanks go to IFIP WG6.1 for sponsoring this event, and to Inria Rhône-Alpes and his director Patrick Gros for their support and sponsorship.

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## **Preface**

This volume contains the proceedings of the 15th IFIP International Conference on Distributed Applications and Interoperable Systems (IFIP DAIS 2015) held during June 2–4, 2015 in Grenoble. DAIS is one of the three conferences that form the Dis-CoTec 2015, the 10th International Federated Conference on Distributed Computing Techniques, together with COORDINATION and FORTE.

The proceedings volume includes 17 papers, among which 14 are full papers and 3 are short papers. The papers relate to areas such as fault tolerance, privacy, resource management, social recommenders, and cloud systems.

The program of the DisCoTec 2015 federated conference also includes invited talks by Alois Ferscha (Johannes Kepler Universität, Austria), Leslie Lamport (Microsoft Research, USA), and Willy Zwaenepoel (EPFL, Switzerland).

We would like to thank the Program Committee members for their effort in evaluating the submitted papers, and thank all the authors of submitted papers for considering DAIS for their work. Additionally, we would like to thank the DAIS Steering Committee for their support in organizing and setting up the conference. We also thank the developers and maintainers of the EasyChair conference management system for making their system available to the research community.

Finally, our thanks also go to IFIP, Inria, and Génération ROBOTS for their support for the DisCoTec 2015 federated conference.

April 2015 Alysson Bessani Sara Bouchenak

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