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The series "Studies in Computational Intelligence" (SCI) publishes new developments and advances in the various areas of computational intelligence—quickly and with a high quality. The intent is to cover the theory, applications, and design methods of computational intelligence, as embedded in the fields of engineering, computer science, physics and life sciences, as well as the methodologies behind them. The series contains monographs, lecture notes and edited volumes in computational intelligence spanning the areas of neural networks, connectionist systems, genetic algorithms, evolutionary computation, artificial intelligence, cellular automata, self-organizing systems, soft computing, fuzzy systems, and hybrid intelligent systems. Of particular value to both the contributors and the readership are the short publication timeframe and the worldwide distribution, which enable both wide and rapid dissemination of research output.

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Intelligent Distributed Computing X

Proceeding of the 10th International Symposium on Intelligent Distributed Computing – IDC 2016, Paris, France, October 10–12 2016

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Preface

Intelligent Distributed Computing emerged as the result of the fusion and cross-fertilization of ideas and research results in Intelligent Computing and Distributed Computing. Its main outcome was the development of the new generation of intelligent distributed systems, by combining methods and technology from classical artificial intelligence, computational intelligence, multi-agent-systems, and distributed systems.

The 10th Intelligent Distributed Computing IDC2016 continues the tradition of the IDC Symposium Series that started 10 years ago as an initiative of two research groups from:

1. Systems Research Institute, Polish Academy of Sciences, Warsaw, Poland
2. Software Engineering Department, University of Craiova, Craiova, Romania

The IDC Symposium welcomes submissions of original papers on all aspects of intelligent distributed computing ranging from concepts and theoretical developments to advanced technologies and innovative applications. The symposium aims to bring together researchers and practitioners involved in all aspects of Intelligent Distributed Computing. IDC is interested in works that are relevant for both Distributed Computing and Intelligent Computing, with scientific merit in these areas.

This volume contains the proceedings of the 10th International Symposium on Intelligent Distributed Computing, IDC2016. The symposium was hosted by the Laboratoire d'Informatique de Paris 6 from the University Pierre and Marie Curie, in Paris, France, between the 10th and the 12th of October, 2016.

The IDC2016 event comprised the main conference organized in eight sessions: Dynamic Systems, Internet of Things, Security, Space-Based Coordination, Behavioral Analysis, Optimization, Data Management and IC-Smart.

The proceedings book contains contributions, with 23 regular papers selected from a total of 38 received submissions from 18 countries (counting the country of each co-author for each paper submitted). Each submission was carefully reviewed by at least three members of the Program Committee. Acceptance and publication were judged based on the relevance to the symposium topics, clarity of presentation, originality and accuracy of results, and proposed solutions. The acceptance rates were 60%, counting only regular papers. The contributions published in this book address many topics related to theory and applications of intelligent distributed computing including: cloud computing, P2P networks, agent-based distributed simulation, ambient agents, smart and context-driven environments, Internet of Things, network security, mobile computing, Unmanned Vehicles, augmented physical reality, swarm computing, team and social computing, constraints and optimization, and information fusion.

We would like to thank Janusz Kacprzyk, editor of Studies in Computational Intelligence series and member of the Steering Committee, for his continuous support and encouragement for the development of the IDC Symposium Series. Also, we would like to thank the IDC2016 Program Committee members for their work in promoting the event and refereeing submissions and also to all colleagues who submitted their work to this event.

We deeply appreciate the efforts of our invited speakers Pr. Serge Haddad from ENS Cachan, France, and Pr. Carlos COTTA from Universidad de Mlaga, Spain, and thank them for their interesting lectures.
A special thanks also go to organizers of the special session IC-Smart : Amal El Fallah Seghrouchni and Kenji Tei. Finally, we appreciate the efforts of local organizers on behalf of the Laboratoire d'Informatique de Paris 6 (LIP6) from the University Pierre and Marie Curie, Sorbonnes Universities, in Paris, France, for hosting and organizing this event.

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