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Nikolaos F. Matsatsinis · Yannis Marinakis ·
Panos Pardalos (Eds.)

Learning and Intelligent Optimization

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Revised Selected Papers

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Preface

This volume, edited by Nikolaos Matsatsinis, Yannis Marinakis, and Panos Pardalos, contains peer-reviewed papers from the 13th Learning and Intelligent Optimization (LION-13) Conference, held in Chania, Crete, Greece, during May 27–31, 2019.

The LION-13 conference continued the successful series of the constantly expanding and worldwide recognized LION events (LION-1: Andalo, Italy, 2007; LION-2 and LION-3: Trento, Italy, 2008 and 2009; LION-4: Venice, Italy, 2010; LION-5: Rome, Italy, 2011; LION-6: Paris, France, 2012; LION-7: Catania, Italy, 2013; LION-8: Gainesville, USA, 2014; LION-9: Lille, France, 2015; LION-10: Ischia, Italy, 2016; LION-11: Nizhny Novgorod, Russia, 2017; and LION-12: Kalamata, Greece, 2018). This edition was organized by Nikolaos Matsatsinis and Yannis Marinakis from the Decision Support Systems Laboratory (ERGA.S.Y.A.) at the Technical University of Crete, Greece, and Panos Pardalos from the Center for Applied Optimization at the University of Florida, USA, who were conference general and Technical Program Committee chairs.

Like its predecessors, the LION-13 international meeting explored advanced research developments in interconnected fields such as mathematical programming, global optimization, machine learning, and artificial intelligence. The location of LION-13 in Chania, Crete, Greece, was an excellent occasion for researchers to meet and consolidate research and personal links.

A total of 38 papers were accepted for oral presentation and presented during the conference. The following three plenary lecturers shared their current research directions with the LION-13 participants:

- Xin-She Yang, Middlesex University London, UK: “Open Problems and Analysis of Nature-Inspired Algorithms”
- Panos Pardalos, Center for Applied Optimization, University of Florida, USA: “Sustainable Interdependent Networks”
- Marco Dorigo, IRIDIA Lab, Université Libre de Bruxelles, Belgium: “Controlling Robot Swarms”

A total of 31 papers were accepted for publication in this LNCS volume after thorough peer reviewing (up to three review rounds for some manuscripts) by the members of the LION-13 Program Committee and independent reviewers. These papers describe advanced ideas, technologies, methods, and applications in optimization and machine learning.

The editors thank all the participants for their dedication to the success of LION-13 and are grateful to the reviewers for their valuable work. The support of the Springer LNCS editorial staff is greatly appreciated.

The editors express their gratitude to the organizers and sponsors of the LION-13 international conference:

– Technical University of Crete
– Region of Crete
– Region of Crete, Regional Unit of Chania
– Cooperative Bank of Chania
– ARIAN Maritime S.A.
– Masters in Technology and Innovation Management
– Smart Tours
– Technical Chamber of Greece, Branch of Western Crete

Their support was essential for the success of this event.

November 2019

Nikolaos Matsatsinis
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