# **Advances in Intelligent Systems and Computing**

## Volume 942

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Ana Maria Madureira · Ajith Abraham · Niketa Gandhi · Catarina Silva · Mário Antunes

Editors

Proceedings of the Tenth International Conference on Soft Computing and Pattern Recognition (SoCPaR 2018)



Editors

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Instituto Superior de Engenharia (ISEP/IPP)

Porto, Portugal

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Mário Antunes Politécnico de Leiria Leiria, Portugal Ajith Abraham

Machine Intelligence Research Labs (MIR)

Auburn, WA, USA

Catarina Silva Politécnico de Leiria Leiria, Portugal

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## **Preface**

Welcome to Porto, Portugal, and to the tenth International Conference on Soft Computing and Pattern Recognition (SoCPaR 2018) and the fourteenth International Conference on Information Assurance and Security (IAS 2018) held at Instituto Superior de Engenharia do Porto (ISEP) during December 13–15, 2018.

SoCPaR 2018 is organized to bring together worldwide leading researchers and practitioners interested in advancing the state of the art in soft computing and pattern recognition, for exchanging knowledge that encompasses a broad range of disciplines among various distinct communities. The themes for this conference are thus focused on "Innovating and Inspiring Soft Computing and Intelligent Pattern Recognition." The conference is expected to provide an opportunity for the researchers to meet and discuss the latest solutions, scientific results, and methods in solving intriguing problems in the fields of soft computing and pattern recognition. SoCPaR 2018 received submissions from 16 countries, and each paper was reviewed by at least five reviewers in a standard peer-review process. Based on the recommendation by five independent referees, finally 22 papers were accepted for the conference (acceptance rate of 47%).

Information assurance and security have become an important research issue in the networked and distributed information sharing environments. Finding effective ways to protect information systems, networks and sensitive data within the critical information infrastructure is challenging even with the most advanced technology and trained professionals. IAS 2018 aims to bring together researchers, practitioners, developers, and policy makers involved in multiple disciplines of information security and assurance to exchange ideas and to learn the latest development in this important field. The conference provided an opportunity for the researchers to meet and discuss the latest solutions, scientific results, and methods in solving intriguing problems in the fields of IAS. IAS 2018 received submissions from 12 countries, and each paper was reviewed by at least five reviewers in a standard peer-review process. Based on the recommendation by five independent referees, finally 16 papers were accepted for the conference (acceptance rate of 45%).

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Conference proceedings are published by Springer Verlag, Advances in Intelligent Systems and Computing Series. Many people have collaborated and worked hard to produce this year successful SoCPaR-IAS 2018 conference. First and foremost, we would like to thank all the authors for submitting their papers to the conference, for their presentations and discussions during the conference. Our thanks to program committee members and reviewers, who carried out the most difficult work by carefully evaluating the submitted papers. We are grateful to our three plenary speakers:

- \* Petia Georgieva, University of Aveiro, Portugal
- \* J. A. Tenreiro Machado, Polytechnic of Porto, Portugal
- \* Henrique M. Dinis Santos, University of Minho, Portugal

Our special thanks to the Springer Publication team for the wonderful support for the publication of these proceedings. Enjoy reading!

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