

# **Advances in Intelligent Systems and Computing**

Volume 642

## **Series editor**

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# Advances in Fuzzy Logic and Technology 2017

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# Foreword

This volume constitutes the proceedings of the two collocated international conferences. The main part includes the papers accepted, after a strict peer review process, for the presentation at, and for the inclusion in the proceedings of the 10th Conference of the European Society for Fuzzy Logic and Technology (EUSFLAT-2017) held in Warsaw, Poland, on September 11–15, 2017. It is combined with the papers accepted, also after a strict peer review process, for the presentation at, and for the inclusion in the proceedings of the Sixteenth International Workshop on Intuitionistic Fuzzy Sets and Generalized Nets (IWIFSGN'2017) held in Warsaw, Poland, on September 13–15, 2017.

The EUSFLAT-2017 Conference was organized by the Systems Research Institute, Polish Academy of Science, Department IV of Engineering Sciences, Polish Academy of Sciences, and the Polish Operational and Systems Research Society. It is the 10th jubilee edition of the flagship conference of the European Society for Fuzzy Logic and Technology (EUSFLAT). The aim of the conference, in line with the mission of the EUSFLAT Society, is to bring together theoreticians and practitioners working on fuzzy logic, fuzzy systems, soft computing, and related areas and to provide for them a platform for the exchange of ideas, discussing newest trends and networking.

The papers included in the proceedings volume have been subject to a thorough review process by highly qualified peer reviewers. Comments and suggestion from them have considerably helped improve the quality of the papers but also the assignment of the papers to best suited sessions in the conference program. In the proceedings volume, the papers have been ordered alphabetically with respect to the name of the first author, and a convenient author's index is included at the end of the volume.

Thanks are due to many people and parties involved. First, in the early stage of the preparation of the conference general perspective, scope, topics, and coverage, we have received an invaluable help from the members of the International Committees of both conferences, notably the chairs responsible for various aspects of the conferences, as well as many people from the European Society for Fuzzy Logic and Technology (EUSFLAT). That help during the initial planning stage had

resulted in a very attractive and up-to-date proposal of the scope and coverage that had clearly implied a considerable interest of the international research communities active in the areas covered who submitted a large number of very interesting and high-level papers. An extremely relevant role of the organizers of special sessions, competition, and other events should also be greatly appreciated. Thanks to their vision and hard work, we had been able to collect many papers on focused topics which had then resulted, during the conferences, in very interesting presentations and stimulating discussions at the sessions.

Though EUSFLAT-2017 is a subsequent edition of the main European conference on the broadly perceived fuzzy logic and technology, and an overwhelming majority of participants come from Europe, many people from other continents have also decided to submit their contributions. This has clearly resulted in a “globalization” of the EUSFLAT conferences which we have been able to increasingly notice since its founding. Of a particular importance in this respect is that among the plenary and keynote speakers, there are top researchers and scholars, as well as practitioners, not only from Europe but also from other continents.

The members of the Program Committee, together with the session organizers, and a group of other anonymous peer reviewers have undertaken a very difficult task of selecting the best papers, and they have done it excellently. They deserve many thanks for their great job for the entire community who is always concerned with quality and integrity. We also wish to thank the members of the EUSFLAT Board for their support throughout the organization process.

At the stage of the running of the conference, many thanks are due to the members of the Organizing Committee, chaired by Ms. Krystyna Warzywoda and Ms. Agnieszka Jóźwiak, and supported by their numerous collaborators.

And last but not least, we wish to thank Dr. Tom Ditzinger, Dr. Leontina di Cecco, and Mr. Holger Schaepe for their dedication and help to implement and finish this large publication project on time maintaining the highest publication standards.

June 2017

The Editors

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