This volume comprises papers accepted for presentation at the 15th International Conference on Rough Sets, Fuzzy Sets, Data Mining and Granular Computing (RSFDGrC 2015), which, along with the 10th International Conference on Rough Sets and Knowledge Technology (RSKT 2015), was held as a major part of the 2015 International Joint Conference on Rough Sets (IJCRS 2015) during November 20–23, 2015, in Tianjin, China. IJCRS is the main annual conference on rough sets. It follows the Joint Rough Set Symposium series, previously organized in 2007 in Toronto, Canada; in 2012 in Chengdu, China; in 2013 in Halifax, Canada; and in 2014 in Granada and Madrid, Spain. In addition to RSFDGrC and RSKT, IJCRS 2015 also hosted the Third International Workshop on Three-way Decisions, Uncertainty, and Granular Computing.

IJCRS 2015 received 97 submissions that were carefully reviewed by two to five Program Committee (PC) members or additional reviewers. After a rigorous process 42 regular papers (acceptance rate 43.3) were accepted for presentation at the conference and publication in the two volumes of proceedings. Subsequently, some authors were selected to submit a revised version of their paper and after a second round of review, 24 more papers were accepted.

At IJCRS 2015 a ceremony was held to honor the new fellows of the International Rough Set Society. The fellows had the possibility to present their contributions in the rough set domain and to propose open questions. This volume contains five of the 11 contributions authored by the fellows Jiye Liang, Dominik Ślęzak, Shusaku Tsumoto, Guoyin Wang, and Ning Zhong.

This volume contains reports of the top six finalists from IJCRS 2015 Data Challenge, which had 90 registered teams with members from 18 different countries and a total of 1,676 submitted solutions. It also contains a summary paper by the challenge organizers Andrzej Janusz, Marek Sikora, Łukasz Wróbel, Sebastian Stawicki, Marek Grzegorowski, Piotr Wojtas, and Dominik Ślęzak.

It is a pleasure to thank all those people who helped this volume come into being and made IJCRS 2015 a successful and exciting event. First of all, we express our thanks to the authors without whom nothing would have been possible. We deeply appreciate the work of the PC members and additional reviewers who assured the high standards of accepted papers.

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Finally, it is our sincere hope that the papers in the proceedings may be of interest to the readers and inspire them in their scientific activities.

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