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Rough Sets and Current Trends in Computing

First International Conference, RSCTC'98
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Preface

The papers collected in this volume were presented at the International Conference on Rough Sets and Current Trends in Computing – RSCTC'98 held in Warsaw, June 22-26, 1998. The conference was intended as a forum for exchanging ideas among experts in various areas of soft computing and researchers in rough set theory and its applications – a branch of soft computing showing a significant growth in years – in order to stimulate mutual understanding and cooperation.

It is our pleasure to dedicate this volume to Professor Zdzisław Pawlak who created the theory of rough sets. The present state of this theory and its applications owes very much to Professor Pawlak's enthusiasm and support.

The conference was held under the patronage of the Committee for Computer Science of the Polish Academy of Sciences as one of the events celebrating the 50th Anniversary of starting Computer Science in Poland and for this we wish to express our thanks to Professor Stefan Wegrzyn, chairman of the committee.

We wish to express our gratitude to Professors Edward A. Feigenbaum, Zdzisław Pawlak, Carl A. Petri, and Lotfi A. Zadeh who accepted our invitation to act as honorary chairs of the conference.

The conference was held in the Barnabite Cultural Center in Warsaw and it was sponsored by grants from the Polish State Committee for Scientific Research (KBN) and by the Institute of Mathematics at Warsaw University, the Department of Electronics and Information Techniques at Warsaw University of Technology, the Polish-Japanese Institute of Computer Techniques and the Japan International Cooperation Agency (JICA).

The following major areas were selected for RSCTC'98:

- Rough Set Theory and Applications
- Fuzzy Set Theory and Applications
- Knowledge Discovery and Data Mining
- Decision Support Systems
- Evolutionary Computations
- Neural Networks
- Computing with Words and Granular Computations
- Grammar Systems and Molecular Computations
- Petri Nets and Concurrency
- Complexity Aspects of Soft Computing
- Pattern Recognition and Image Processing
- Statistical Inference
- Logical Aspects of Soft Computing
- Applications of Soft Computing

We wish to express our thanks to members of the advisory board: M. Drzewiecki, J. W. Grzymala-Busse, T.Y. Lin, K. Malinowski, T. Munakata, A. Nakamura, S. Ohsuga, F. Petry, Z. W. Raś, G. Rozenberg, S. Shimada, R. Słowiński, H. Tanaka, B. Trakhtenbrot, S. Tsumoto, P.P. Wang, S. Węgrzyn, W. Ziarko for their contribution to the scientific program of the conference.

The accepted papers selected from 90 draft papers were divided into regular communications (allotted 8 pages in this volume) and short communications (allotted 4 pages in this volume) on the basis of reviewer grades. The process of reviewing rested with members of the program committee: R. Agrawal, Shun-ichi Amari, Th. Baeck, M.C.F. Fernández-Baizán, J. Bielecki, H.-D. Burkhard, G. Cattaneo, M. Chakraborty, N. Cercone, J.-C. Cubero, A. Czyżewski, J. Doroszewski, D. Dubois, I. Duentsch, M. Grabish, J. Kacprzyk, T. Kaczorek, W. Kloesgen, J. Komorowski, J. Koronacki, W. Kowalczyk, M. Kryszkiewicz, P. Lingras, T. Luba, S. Marcus, V. W. Marek, Z. Michalewicz, R. Michalski, M. Moshkov, Son H. Nguyen, M. Novotny, E. Orłowska, K. Oshima, P. Pagliani, S. K. Pal, Gh. Paun, W. Pedrycz, J. F. Peters, A. Pettorossi, Z. Piasta, F. G. Pin, L. Polkowski, H. Prade, V. Raghavan, B. Reusch, H. Rybiński, R. Schaefer, W. Skarbek, A. Skowron (chair), K. Słowiński, J. Stefanowski, J. Stepaniuk, R. Swiniarski, A. Szałas, R. Tadeusiewicz, H. Thiele, W. Traczyk, D. Vakarelov, H.-M. Voigt, A. Wasilewska, A. Wierzbicki, S.K.M. Wong, S. Yamane, Y. Y. Yao, J. Zabrodzki, Ning Zhong, J. Źytkow.

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Invited lectures were presented at the conference by Professors Rakesh Agrawal, Edward A. Feigenbaum, Wolfgang Haerdle, Willi Kloesgen, Solomon Marcus, V. Wiktor Marek, Zdzisław Pawlak and Lotfi A. Zadeh. We wish to express our thanks to them.

The organizing committee members: A. Jankowski, M. Toho (JICA), D. Gello (secretary), Son Hung Nguyen, Sinh Hoa Nguyen, Tuan Trung Nguyen (conference database, papers processing), D. Ślęzak (contact person), M. Szczuka (finances), P. Synak, P. Wojdyło, J. Wróblewski, P. Ejdys, G. Góra, M. Kryszkiewicz (deputy chair), L. Polkowski (chair) wish to express their thanks to all partners for their kind cooperation.

Our special thanks go to all individuals who submitted papers for the conference and to all conference participants.

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