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# SKAD'11 – Soft Computing Applications and Knowledge Discovery

Workshop co-located with the 13th International Conference on Rough Sets, Fuzzy Sets, Data Mining, and Granular Computing (RSFDGrC-2011) and the 4th International Conference on Pattern Recognition and Machine Intelligence (PReMI-2011)

June 2011, Moscow, Russia

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#### Preface

Soft computing is a collection of methodologies, which aim to exploit tolerance for imprecision, uncertainty and partial truth to achieve tractability, robustness and low cost solution in real life tasks. This volume contains the papers presented at SCAKD-2011: The International Workshop on Soft Computing Applications and Knowledge Discovery held on June 25, 2011 in Moscow. This workshop was initiated with the aim of presenting high quality scientific results and promising research in the areas of soft computing and data mining, particularly by young researchers, with an objective of bringing them to the focus while promoting collaborative research activities. The main goal of this workshop was to gather researchers all areas of Soft Computing Applications and Knowledge Discovery, including but not limited to the following: Pattern Recognition, Data Mining & Knowledge Discovery, Fuzzy & Neural Networks, Evolutionary & Probabilistic Computing, Swarm Intelligence, Collective Intelligence, Machine Learning, Information Retrieval, Rough Sets, Soft Computing, Bio-informatics, Biometrics, Computational Biology, Clustering, Formal Concept Analysis, Ontology Learning, Decision Support Systems & Business Intelligence (OLAP and BI, Data Warehouse Modeling, ETL techniques and technologies, and Data Visualization), Recommender Systems, Modeling of user behavior, and Applications of Soft Computing.

By holding the workshop in conjunction with PReMI and RSFDGrC, we hope to provide the contributers exposure and interaction with eminent scientists, engineers, professionals, and researchers in related fields. We are proud that in total, 15 papers were accepted for oral presentation and publication in the proceedings. Finally we would like to say a word of thank to the administration of the Higher School of Economics who took care of all arrangements to make this conference pleasant and enjoyable.

June, 2011 Moscow Alexey N. Averkin Dmitry I. Ignatov Sushmita Mitra Jonas Poelmans Valery B. Tarasov

## Organization

This SCAKD'11 workshop was held in June 2011 in Moscow, Russia co-located with the 13th International Conference on Rough Sets, Fuzzy Sets, Data Mining, and Granular Computing (RSFDGrC-2011) and 4th International Conference on Pattern Recognition and Machine Intelligence (PReMI-2011) at the National Research University Higher School of Economics.

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