



# Advances in Intelligent and Soft Computing

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# Preface

Today, there are many real world complex problems that cannot be easily dealt with traditional mathematical methods. If the user is not very conscious about the exact solution of the problem at hand, then soft computing techniques come into picture and provide affordable solutions. Soft Computing represents a collection of computational techniques inheriting inspiration from Evolutionary Algorithms, Nature Inspired Algorithms, Bio-Inspired Algorithms, Neural Networks and Fuzzy Logic.

Soft Computing techniques are gaining much popularity in recent years due the fact that real world problems have become increasingly large, complex and dynamic. The size and complexity of the problems nowadays require the development of methods which can give the solution within a reasonable amount of time rather than an ability to guarantee the exact solution.

The theme of the International Conference on Soft Computing for Problem Solving (SocProS 2011) lies in Soft Computing and its applications to solve various real world problems. SocProS 2011 turned out to be a unique forum of researchers and practitioners to present advances in this ever growing field.

SocProS 2011 attracts a wide spectrum of thought-provoking research papers on various aspects of Soft Computing with umpteen applications, theories, and techniques. A total 194 research papers are selected for publication in the Proceedings, which is in Volume 1 and Volume 2.

The editors would like to express their sincere gratitude to the Plenary Speakers, Invited Speakers, Reviewers, Programme Committee Members, International Advisory Committee, Local Organizing Committee, without whose support the quality and standards of the Conference as well as this Proceedings would not have seen the light of the day.

On the Institutional side, we would like to express our gratitude to The Institution of Engineers (India), Roorkee Local Centre, Indian Institute of Technology Roorkee Campus, Roorkee, India to provide us a platform to host this Conference. Thanks are also due to the various sponsors of SocProS 2011.

We hope that the papers contained in this proceeding will prove helpful toward improving the understanding of Soft Computing at teaching as well as research level and will inspire more and more researchers to work in the field of soft computing.

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