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Mohammad Shorif Uddin · Jagdish Chand Bansal Editors

# Proceedings of International Joint Conference on Computational Intelligence

IJCCI 2018



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## Preface

This book contains high-quality research papers as the proceedings of the International Joint Conference on Computational Intelligence (IJCCI 2018). IJCCI 2018 has been jointly organized by Daffodil International University (DIU), Bangladesh; Jahangirnagar University (JU), Bangladesh; and South Asian University (SAU), India. It was held on 14-15 December 2018 at DIU, Dhaka, Bangladesh. The conference was conceived as a platform for disseminating and exchanging ideas, concepts and results of the researchers from academia and industry to develop a comprehensive understanding of the challenges of the advancements of intelligence in computational viewpoints. This book will help in strengthening a congenial and nice networking between academia and industry. The conference focused on collective intelligence, soft computing, optimization, cloud computing, machine learning, intelligent software, robotics, data science, data security, big data analytics, signal and natural language processing. This conference is a biennial update of the first conference named International Workshop on Computational Intelligence (IWCI 2016) that was held on 12-13 December 2016 at Jahangirnagar University, Dhaka, Bangladesh, in collaboration with South Asian University (SAU), India, under the technical co-sponsorship of IEEE Bangladesh Section. All accepted and presented papers of IWCI 2016 are in IEEE Xplore Digital Library. We have tried our best to enrich the quality of IJCCI 2018 through a stringent and careful peer review process. IJCCI 2018 received 182 papers from 496 authors (459 are local authors and 37 are foreign authors from 9 countries), and 63 papers were finally accepted for presentation. However, the proceedings contain 61 papers.

In fact, this book presents the novel contributions in areas of computational intelligence and it serves as a reference material for advanced research.

Dhaka, Bangladesh New Delhi, India Mohammad Shorif Uddin Jagdish Chand Bansal

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