Engineering Applications and Computational Algorithms

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Preface

The Third International DCDIS Conference on Engineering Applications and Computational Algorithms was held at the University of Guelph, Guelph, Ontario, Canada, May 15-18, 2003. This conference attracted over 250 full paper submissions from distinguished scientists, engineers, and applied mathematicians around the world.

There has been exciting progress in the broad field of engineering and scientific computation in recent years. The conference provided an international forum for leading experts in various branches of engineering and applied mathematics as well as young scholars from different parts of the globe. There were 20 organized and contributed sessions covering recent trends and continued interests as well as important applications in various disciplines. The conference witnessed exciting interactions and communications among researchers, which should bring more cooperation and collaboration to the world community.

This special volume consists of a collection of selected papers submitted to the conference. They represent some of the most recent developments in various branches of engineering applications, scientific computations and applied mathematics. They reflect the contemporary achievements and topics of current interests. All the papers went through a strict refereeing process. I am deeply grateful to all the referees who provided prompt and extensive reviews for all the submissions. Their constructive comments had improved the quality of the papers in the volume. This volume would not have been possible without the assistance of many of my colleagues. I wish to express my sincere appreciation to those who helped. In particular, my thanks go to Professors G. Chen, T. Chen, Z. Gajic, X. Yang, X. Shen, P. Yu and all the special session organizers. My special thanks go to Professor Simon X. Yang, who made significant contribution to the organization of the conference. Last but not the least, I am very thankful to Mr. Yili Li, who provided great technical assistance to the conference.

This volume may be useful to system engineers, applied mathematicians, scientists, numerical analysts, researchers in dynamical systems and scientific computation, and graduate students in those disciplines. I do hope that this special volume will stimulate new important research and bring more exiting developments in the fields of engineering applications and scientific computations.

Xinzhi Liu
General Chair

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