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Preface

The Organizing Committee of the 5th International Conference on Intelligent Robotics and Applications aimed to facilitate interaction among participants in the field of intelligent robotics, automation, and mechatronics. Through this conference, the committee intended to enhance the sharing of individual experiences and expertise in intelligent robotics with particular emphasis on technical challenges associated with varied applications such as biomedical applications, industrial automations, surveillance, and sustainable mobility.

The 5th International Conference on Intelligent Robotics and Applications was most successful in attracting 271 submissions addressing state-of-the-art developments in robotics, automation, and mechatronics. Owing to the large number of submissions, the committee was faced with the difficult challenge of selecting the most deserving papers for inclusion in these lecture notes and for presentation at the conference, held in Montreal, Canada, October 3–5, 2012. For this purpose, the committee undertook a rigorous review process. Despite the high quality of most of the submissions, a total of 197 papers were selected for publication in 3 volumes of Springer's Lecture Notes in Artificial Intelligence, a subseries of Lecture Notes in Computer Science.

The selected articles were submitted by scientists from 25 different countries. The contribution of the Technical Program Committee and the referees is deeply appreciated. Most of all, we would like to express our sincere thanks to the authors for submitting their most recent work and the Organizing Committee for their enormous efforts to turn this event into a smoothly running meeting. Special thanks go to Concordia University for their generosity and direct support. Our particular thanks are due to Mr. Alfred Hofmann and the editorial staff of Springer-Verlag for enthusiastically supporting the project.

We sincerely hope that these volumes will prove to be an important resource for the scientific community.

July 2012

Chun-Yi Su
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