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Preface

The Organizing Committee of the 8th International Conference on Intelligent Robotics and Applications aimed to facilitate interactions among active 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 application, industrial automations, surveillance, and sustainable mobility.

The 8th International Conference on Intelligent Robotics and Applications was most successful in attracting 228 submissions by researchers from 20 countries addressing the state-of-the art developments in robotics, automation, and mechatronics. Owing to the large number of valuable submissions, the committee was faced with the difficult challenge of selecting the most deserving papers for inclusion in these lecture notes and presentation at the conference. For this purpose, the committee undertook a rigorous review process. Despite the high quality of most of the submissions, a total of 172 papers were selected for publication in three volumes of Springer's *Lecture Notes in Artificial Intelligence* as subseries of *Lecture Notes in Computer Science*, with an acceptance rate of 75.4 %. The selected papers were presented at the 8th International Conference on Intelligent Robotics and Applications held during August 24–27, 2015, in Portsmouth, UK.

The contribution of the Technical Program Committee and the reviewers is deeply appreciated. Most of all, we would like to express our sincere thanks to the authors for submitting their most recent work and to the Organizing Committee for their enormous efforts to turn this event into a smoothly run meeting. Special thanks go to the University of Portsmouth for their generosity and direct support. Our particular thanks are due to Alfred Hofmann and Anna Kramer of Springer for enthusiastically supporting the project.

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

June 2015

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