

PREFACE

Robotics has been an exciting field in engineering and natural sciences for many decades; it has held considerable fascination for researchers and scholars and many important contributions have been made by industrial robots in various manufacturing tasks such as assembly, welding, painting, and material handling. In recent times, we have been witnessing the emergence of new service robots which are intended to perform a variety of tasks in new environments such as search and rescue, surveillance, exploration and security missions as well as provide assistance to various users. The emergence of mobile machines for these new service missions in unstructured environments has significantly broadened research and development challenges (both technical and non-technical) that need to be considered for successfully widening their adoption.

CLAWAR 2009 is the twelfth in a series of international conferences on Climbing and Walking Robots and the Support Technologies for Mobile Machines. The aim of the conference is to provide an open forum where researchers, scientists, engineers and practitioners from throughout the world can come together to present and discuss the latest achievements, future challenges and exciting applications for mobile service machines in general, and climbing and walking robots in particular. The proceedings of CLAWAR 2009 include state of the art research and development findings presented during the CLAWAR 2009 conference in 141 technical presentations by authors from 29 countries covering the five continents.

The editors would like to thank members of the International Programme Committee, International Advisory Committee and National Organising Committee for their efforts in reviewing the submitted papers, and the authors in addressing the comments and suggestions of the reviewers in their final submissions. It is intended that the CLAWAR 2009 proceedings will be a valuable source of reference for research and development in mobile robotics.

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