

Human-Centric Robotics

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Proceedings of CLAWAR 2017: 20th International Conference on Climbing and Walking Robots and the Support Technologies for Mobile Machines

Porto, Portugal, 11 – 13 September 2017

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PREFACE

CLAWAR 2017 is the twentieth edition of International Conference series on Climbing and Walking Robots and the Support Technologies for Mobile Machines. The conference is organized by CLAWAR Association in collaboration with Instituto Superior de Engenharia do Porto (ISEP) within the premises of ISEP, Porto, Portugal during 11 – 13 September, 2017.

CLAWAR 2017 brings new developments and associated new research findings in human-centric robotics technologies. The topics covered include assistive robotics for levels of augmentation to full support for elderly and disabled mobility, rehabilitation and function restoration; services to humans in industrial, public and domestic environments; new locomotion and design strategies to help in climbing on various terrains; navigation and localisation approaches, non-destructive testing and inspection strategies for industrial applications.

The CLAWAR 2017 conference includes a total of 83 articles, including four plenary lectures, from 21 countries. This number has been arrived at through rigorous review of initial submissions, where each paper initially submitted has received on average three reviews.

The editors would like to thank members of the International Scientific Committee and National Organising Committee for their efforts in reviewing the submitted articles, and the authors in addressing the comments and suggestions of the reviewers in their final submissions. It is believed that the CLAWAR 2017 proceedings will be a valuable source of reference for research and development in the rapidly growing area of mobile service robotics.

M. F. Silva, G. S. Virk, M. O. Tokhi, B. Malheiro, P. Ferreira, P. Guedes

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