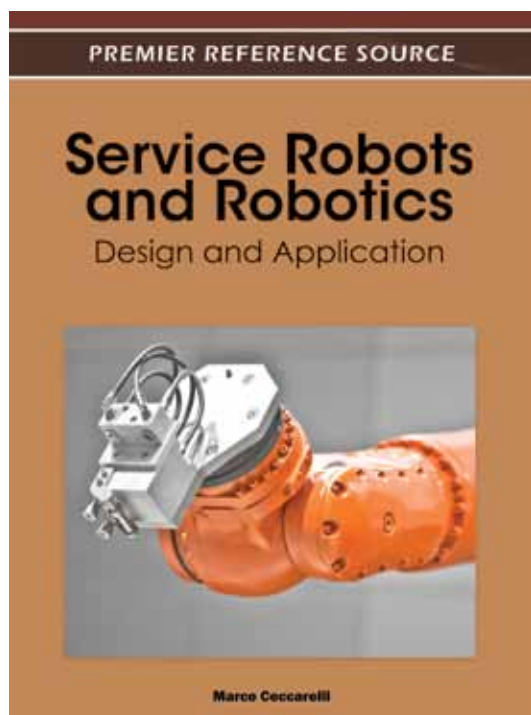


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Service Robots and Robotics: Design and Application



Marco Ceccarelli
(University of Cassino, Italy)

Service robots serve a wide range of people in residential, commercial, industrial, military, and many more applied fields.

Service Robots and Robotics: Design and Application offers the latest research within the field, combining a mixture of case studies, research, and future directions. Staying abreast of the latest research within the field not only affords practitioners and academics the foot forward they need, it allows for a comprehensive look into the latest advances in a burgeoning field of technology. From tasks no humans can do to everyday tasks for the disabled and elderly, service robots are an enormously important facet of modern technology, and this volume offers a current look into their state of the art.

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- Domestic robot
- Human-machine interaction
- Kinematic design
- Motion generation
- Nonconventional applications
- PatrolBot
- Security robot
- Sensor equipment
- Teaching projects

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Marco Ceccarelli is Full Professor of Mechanics of Machinery and Director of LARM, Laboratory of Robotics and Mechatronics at University of Cassino. He is a member of Robotics Commission of IFToMM, the International Federation for the Promotion of Machine and Mechanism Science. He has written the books *Fundamentals of Mechanics of Robotic Manipulation* in 2004 and *Mecanismos* in 2008. He is current President of IFToMM. His research interests are in mechanics of mechanisms and robots. He is author/co-author of 500 papers, presented at conferences or published in journals, he has edited 14 books, and conference proceedings and specific topics.

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