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Titolo	Wheeled mobile robotics : from fundamentals towards autonomous systems // edited by Gregor Klanar
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ISBN	0-12-804238-9
Edizione	[1st edition]
Descrizione fisica	1 online resource (504 pages) : illustrations (some color)
Disciplina	629.892
Soggetti	Mobile robots Robotics - Mathematics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Sommario/riassunto	Wheeled Mobile Robotics: From Fundamentals Towards Autonomous Systems covers the main topics from the wide area of mobile robotics, explaining all applied theory and application. The book gives the reader a good foundation, enabling them to continue to more advanced topics. Several examples are included for better understanding, many of them accompanied by short MATLAB® script code making it easy to reuse in practical work. The book includes several examples of discussed methods and projects for wheeled mobile robots and some advanced methods for their control and localization. It is an ideal resource for those seeking an understanding of robotics, mechanics, and control, and for engineers and researchers in industrial and other specialized research institutions in the field of wheeled mobile robotics. Beginners with basic math knowledge will benefit from the examples, and engineers with an understanding of basic system theory and control will find it easy to follow the more demanding fundamental parts and advanced methods explained. Offers comprehensive coverage of the essentials of the field that are suitable for both academics and practitioners Includes several examples of the application of algorithms in simulations and real laboratory projects Presents foundation in mobile robotics theory before continuing with more advanced topics

Self-sufficient to beginner readers, covering all important topics in the mobile robotics field Contains specific topics on modeling, control, sensing, path planning, localization, design architectures, and multi-agent systems
