

1. Record Nr.	UNINA9910876675803321
Autore	Jaulin Luc <1967->
Titolo	Mobile robotics // Luc Jaulin
Pubbl/distr/stampa	London, : ISTE Hoboken, N.J., : Wiley, 2019 London : , : ISTE, , 2019
ISBN	1-5231-2835-6 1-119-66354-7 1-119-66349-0
Edizione	[Rev. and updated 2nd ed]
Descrizione fisica	1 online resource (390 pages)
Collana	Systems and industrial engineering series / series editor, Hisham Abou-Kandil
Classificazione	548.3 629.892
Disciplina	629.892
Soggetti	Mobile robots
Lingua di pubblicazione	Non definito
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Previous ed.: 2015 Includes bibliographical references (p. [359]-360) and index
Nota di bibliografia	Includes bibliographical references (pages [359]-360) and index.
Nota di contenuto	Three-dimensional Modeling -- Feedback Linearization -- Model-free Control -- Guidance -- Instantaneous Localization -- Identification -- Kalman Filter -- Bayes Filter.
Sommario/riassunto	Mobile Robotics presents the different tools and methods that enable the design of mobile robots; a discipline booming with the emergence of flying drones, underwater mine-detector robots, robot sailboats and vacuum cleaners. Illustrated with simulations, exercises and examples, this book describes the fundamentals of modeling robots, developing the concepts of actuators, sensors, control and guidance. Three-dimensional simulation tools are also explored, as well as the theoretical basis for the reliable localization of robots within their environment. This revised and updated edition contains additional exercises and a completely new chapter on the Bayes filter, an observer that enhances our understanding of the Kalman filter and facilitates certain proofs.