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| Autore                  | Jaulin Luc <1967->   |
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| 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<br>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<br>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. |