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Titolo	Optimal Search for Moving Targets [[electronic resource] /] / by Lawrence D. Stone, Johannes O. Royset, Alan R. Washburn
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Descrizione fisica	1 online resource (222 p.)
Collana	International Series in Operations Research & Management Science, , 0884-8289 ; ; 237
Disciplina	650
Soggetti	Operations research Decision making Management science Market research Operations Research/Decision Theory Operations Research, Management Science Market Research/Competitive Intelligence
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Introduction -- Search for a Stationary Target -- Search for a Moving Target in Discrete Space and Time -- Path-Constrained Search in Discrete Time and Space -- Search for Moving Targets in Continuous Space -- Constrained Search in Continuous Time and Space -- Search Games. .
Sommario/riassunto	This book begins with a review of basic results in optimal search for a stationary target. It then develops the theory of optimal search for a moving target, providing algorithms for computing optimal plans and examples of their use. Next it develops methods for computing optimal search plans involving multiple targets and multiple searchers with realistic operational constraints on search movement. These results assume that the target does not react to the search. In the final chapter there is a brief overview of mostly military problems where the target tries to avoid being found as well as rescue or rendezvous problems where the target and the searcher cooperate. Larry Stone wrote his

definitive book Theory of Optimal Search in 1975, dealing almost exclusively with the stationary target search problem. Since then the theory has advanced to encompass search for targets that move even as the search proceeds, and computers have developed sufficient capability to employ the improved theory. In this book, Stone joins Royset and Washburn to document and explain this expanded theory of search. The problem of how to search for moving targets arises every day in military, rescue, law enforcement, and border patrol operations.

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