

1. Record Nr.	UNINA9910728944303321
Autore	Stone Lawrence D
Titolo	Introduction to Bayesian Tracking and Particle Filters [[electronic resource] /] / by Lawrence D. Stone, Roy L. Streit, Stephen L. Anderson
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2023
ISBN	3-031-32242-8
Edizione	[1st ed. 2023.]
Descrizione fisica	1 online resource (124 pages)
Collana	Studies in Big Data, , 2197-6511 ; ; 126
Altri autori (Persone)	StreitRoy L AndersonStephen L
Disciplina	620.00285
Soggetti	Engineering—Data processing Statistics Big data Data Engineering Bayesian Inference Big Data
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Introduction -- Bayesian Single Target Tracking -- Bayesian Particle Filtering -- Simple Multiple Target Tracking -- Intensity Filters.
Sommario/riassunto	This book provides a quick but insightful introduction to Bayesian tracking and particle filtering for a person who has some background in probability and statistics and wishes to learn the basics of single-target tracking. It also introduces the reader to multiple target tracking by presenting useful approximate methods that are easy to implement compared to full-blown multiple target trackers. The book presents the basic concepts of Bayesian inference and demonstrates the power of the Bayesian method through numerous applications of particle filters to tracking and smoothing problems. It emphasizes target motion models that incorporate knowledge about the target's behavior in a natural fashion rather than assumptions made for mathematical convenience. The background provided by this book allows a person to quickly become a productive member of a project team using Bayesian filtering and to develop new methods and techniques for problems the

team may face.

---