

1. Record Nr.	UNINA9910346783603321
Autore	Huber Marco
Titolo	Nonlinear Gaussian Filtering : Theory, Algorithms, and Applications
Pubbl/distr/stampa	KIT Scientific Publishing, 2015
ISBN	1000045491
Descrizione fisica	1 online resource (V, 270 p. p.)
Collana	Karlsruher Schriften zur Anthropomatik / Lehrstuhl für Interaktive Echtzeitsysteme, Karlsruher Institut für Technologie ; Fraunhofer-Inst. für Optronik, Systemtechnik und Bildauswertung IOSB Karlsruhe
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	By restricting to Gaussian distributions, the optimal Bayesian filtering problem can be transformed into an algebraically simple form, which allows for computationally efficient algorithms. Three problem settings are discussed in this thesis: (1) filtering with Gaussians only, (2) Gaussian mixture filtering for strong nonlinearities, (3) Gaussian process filtering for purely data-driven scenarios. For each setting, efficient algorithms are derived and applied to real-world problems.