Record Nr. UNINA9910254215003321 Autore Sworder David D Titolo Locating, Classifying and Countering Agile Land Vehicles: With Applications to Command Architectures / / by David D. Sworder, John E. Boyd Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2016 3-319-19431-3 ISBN Edizione [1st ed. 2016.] Descrizione fisica 1 online resource (300 p.) Disciplina 620 Soggetti Signal processing Image processing Speech processing systems Multimedia systems Electrical engineering System safety Signal, Image and Speech Processing Multimedia Information Systems Communications Engineering, Networks Security Science and Technology 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. Nota di contenuto A Model for Tracking and Classification -- Target Location Using the Extended Kalman Filter -- Tracking an Agile Target -- Intercept and Target Prediction -- Classification and Target Tempo -- Assurance Regions on a Road Grid -- ActionWindows with Resource Limits --Serendipitous Events in Tracking and Classification -- Deceiving a Classifier. Sommario/riassunto This book examines real-time target tracking and identification algorithms with a focus on tracking an agile target. The authors look at several problems in which the tradeoff of accuracy and confidence must be made. These issues are explored within the context of specific tracking scenarios chosen to illustrate the tradeoffs in a simple and

direct manner. The text covers the Gaussian wavelet estimator (GWE)

which has a flexible architecture that is able to fuse uncommon sensor combinations with non-temporal structural constraints. Discusses applied estimation and prediction of terrestrial targets. Covers fusion of heterogeneous sensor types and tracking with non-temporal engagement constraints. Examines confidence that the target will be captured and motion analysis of land vehicles.