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| Sommario/riassunto      | <p>"...an authentic magnum opus worth much more than its weight in gold!" IEEE Transactions on Automatic Control, from a review of the First Edition "The best book I've seen on the subject of Kalman filtering</p> <p>...Reading other books on Kalman filters and not this one could make you a very dangerous Kalman filter engineer." Amazon.com, from a review of the First Edition In this practical introduction to Kalman filtering theory and applications, authors Grewal and Andrews draw upon their decades of experience to offer an in-depth examination of the subtleties, common problems, and limitations of estimation theory as it applies to real-world situations. They provide many illustrative examples drawn from an array of application areas including GPS-aided INS, the modeling of gyros and accelerometers, inertial navigation, and freeway traffic control.; In addition, they share many hard-won lessons about, and original methods for, designing, implementing, validating, and improving Kalman filters, including techniques for: Representing the problem in a mathematical model Analyzing estimator performance as a function of model parameters Implementing the mechanization equations in numerically stable algorithms Assessing computational requirements Testing the validity of results Monitoring filter</p> |

performance in operation. As the best way to understand and master a technology is to observe it in action, *Kalman Filtering: Theory and Practice Using MATLAB(r)*, Second Edition includes companion software in MATLAB(r), providing users with an opportunity to experience first hand the filter's workings and its limitations. This updated and revised edition of Grewal and Andrews's classic guide is an indispensable working resource for engineers and computer scientists involved in the design of aerospace and aeronautical systems, global positioning and radar tracking systems, power systems, and biomedical instrumentation.

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