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PROPAGATION OF THE STATE ESTIMATE AND ITS UNCERTAINTY; 4.3 DISCRETE-TIME OPTIMAL FILTERS AND PREDICTORS; 4.4 CORRELATED DISTURBANCE INPUTS AND MEASUREMENT NOISE
4.5 CONTINUOUS-TIME OPTIMAL FILTERS AND PREDICTORS4.6 OPTIMAL NONLINEAR ESTIMATION; 4.7 ADAPTIVE FILTERING; PROBLEMS; REFERENCES; 5 - STOCHASTIC OPTIMAL CONTROL; 5.1 NONLINEAR SYSTEMS WITH RANDOM INPUTS AND PERFECT MEASUREMENTS; 5.2 NONLINEAR SYSTEMS WITH RANDOM INPUTS AND IMPERFECT MEASUREMENTS; 5.3 THE CERTAINTY-EQUIVALENCE PROPERTY OF LINEAR-QUADRATIC-GAUSSIAN CONTROLLERS; 5.4 LINEAR, TIME-INVARIANT SYSTEMS WITH RANDOM INPUTS AND IMPERFECT MEASUREMENTS; PROBLEMS; REFERENCES; 6 - LINEAR MULTIVARIABLE CONTROL; 6.1 SOLUTION OF THE ALGEBRAIC RICCATI EQUATION
6.2 STEADY-STATE RESPONSE TO COMMANDS6.3 COST FUNCTIONS AND CONTROLLER STRUCTURES; 6.4 MODAL PROPERTIES OF OPTIMAL CONTROL SYSTEMS; 6.5 ROBUSTNESS OF LINEAR-QUADRATIC REGULATORS; 6.6 ROBUSTNESS OF STOCHASTIC-OPTIMAL REGULATORS; 6.7 FOOTNOTE ON ADAPTIVE CONTROL; PROBLEMS; REFERENCES; EPILOGUE; INDEX; ABOUT THE AUTHOR; A CATALOG OF SELECTED DOVER BOOKS IN SCIENCE AND MATHEMATICS

Sommario/riassunto

""An excellent introduction to optimal control and estimation theory and its relationship with LQG design. . . . invaluable as a reference for those already familiar with the subject."" - Automatica. This highly regarded graduate-level text provides a comprehensive introduction to optimal control theory for stochastic systems, emphasizing application of its basic concepts to real problems. The first two chapters introduce optimal control and review the mathematics of control and estimation. Chapter 3 addresses optimal control of systems that may be nonlinear and time-varying, but whose input

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Nota di contenuto	Intro -- Preface -- Organization -- Contents -- Invited Keynotes -- Federated Learning: Issues in Medical Application -- 1 Introduction -- 2 Federated Learning in Medical Applications -- 2.1 Physical Disorder Predictions -- 2.2 Mental Disorder Predictions -- 2.3 Other Medical Applications -- 3 Research Issues -- 3.1 Heterogeneity Issues -- 3.2 Client Management Issues -- 3.3 Traceability and Accountability Issues -- 3.4 Privacy and Security Issues -- 4 Modular Framework Under Development -- 5 Conclusion and Future Works -- References -- Time in Data Models -- 1 Introduction -- 2 Representing Time -- 3 Snapshots vs. Historical Data Models -- 4 Temporal Databases -- 5 Temporal Multiversion Data Models -- 6 Temporal Integrity Constraints -- 7 Conclusions -- References -- Big Data Analytics and Distributed

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Sommario/riassunto

This book constitutes the proceedings of the 8th International Conference on Future Data and Security Engineering, FDSE 2021, which was supposed to be held in Ho Chi Minh City, Vietnam, in November 2021, but the conference was held virtually due to the COVID-19 pandemic. The 24 full papers presented together with 2 invited keynotes were carefully reviewed and selected from 168 submissions. The selected papers are organized into the following topical headings: Big Data Analytics and Distributed Systems; Advances in Machine Learning for Big Data Analytics; Industry 4.0 and Smart City: Data Analytics and Security; Blockchain and IoT Applications; Machine Learning and Artificial Intelligence for Security and Privacy; Emerging Data Management Systems and Applications.