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Autore	Heij C.
Titolo	Introduction to Mathematical Systems Theory : Discrete Time Linear Systems, Control and Identification / / by Christiaan Heij, André C.M. Ran, Frederik van Schagen
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Descrizione fisica	1 online resource (199 pages)
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Soggetti	System theory Control theory Mathematics Probabilities Mathematics - Data processing Systems Theory, Control Applications of Mathematics Probability Theory Computational Science and Engineering
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Nota di contenuto	Preface -- Dynamical Systems -- Input-Output Systems -- State Space Models -- Stability -- Optimal Control -- Stochastic Systems -- Filtering and Prediction -- Stochastic Control -- System Identification -- Cycles and Trends -- Further Developments.
Sommario/riassunto	This book provides an introduction to the theory of linear systems and control for students in business mathematics, econometrics, computer science, and engineering. The focus is on discrete time systems, which are the most relevant in business applications, as opposed to continuous time systems, requiring less mathematical preliminaries. The subjects treated are among the central topics of deterministic linear system theory: controllability, observability, realization theory, stability and stabilization by feedback, LQ-optimal control theory. Kalman filtering and LQC-control of stochastic systems are also

discussed, as are modeling, time series analysis and model specification, along with model validation. This second edition has been updated and slightly expanded. In addition, supplementary material containing the exercises are now available on the Springer Link's book website.

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