

1. Record Nr.	UNINA9910292960103321
Titolo	Macchine nascoste : discipline e tecniche di rappresentazione nella composizione architettonica / a cura di Riccardo Palma, Carlo Ravagnati ; con saggi di Giancarlo Motta ... [et al.]
Pubbl/distr/stampa	Torino : UTET libreria, 2004
ISBN	88-7750-896-5
Descrizione fisica	IX, 225 p., [32] c. di tav. : ill. ; 24 cm
Disciplina	729 721
Locazione	FARBC
Collocazione	ARCH B 3184
Lingua di pubblicazione	Italiano
Formato	Materiale a stampa
Livello bibliografico	Monografia

2. Record Nr.	UNINA9911034857903321
Autore	Stipanovi Dusan
Titolo	Difference Equations and Machine Learning // by Dušan Stipanovi
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2025
ISBN	3-032-00910-3
Edizione	[1st ed. 2025.]
Descrizione fisica	1 online resource (187 pages)
Collana	Synthesis Lectures on Mathematics & Statistics, , 1938-1751
Disciplina	515.625 515.75
Soggetti	Difference equations Functional equations Machine learning Artificial intelligence Mathematical analysis Neural networks (Computer science) Mathematics Difference and Functional Equations Machine Learning Artificial Intelligence Analysis Mathematical Models of Cognitive Processes and Neural Networks Applications of Mathematics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Introduction -- Linear Difference Equations -- Nonlinear Difference Equations -- Stability and Chaotic Behaviors of Difference Equations -- Control of Difference Equations -- Applications to Neural Networks and Machine Learning -- Conclusions.
Sommario/riassunto	This book presents in-depth explanations of well-known and recognized behaviors of neural networks in machine learning. In addition, the author provides novel technical analyses of behaviors of discrete-time dynamical systems modeled as difference equations. These analyses and their outcomes are closely related to models of very

well-known neural networks such as Long Short-Term Memory (LSTM) and Gated Recurrent Unit (GRU) neural networks, which are widely used in machine learning and artificial intelligence (AI) applications. The author also discusses difference equations and their relevance to neural networks, machine learning, and AI. In addition, this book: Includes characterizations of difference equations and technical perspectives of discrete-time systems Provides new insights into the dynamical behaviors of some of the most popular neural networks used in machine learning Discusses novel technical analyses of discrete-time dynamical systems modeled as difference equations.

3. Record Nr.	UNINA9910437910103321
Autore	Gershon Eli
Titolo	Advanced Topics in Control and Estimation of State-Multiplicative Noisy Systems // by Eli Gershon, Uri Shaked
Pubbl/distr/stampa	London : , : Springer London : , : Imprint : Springer, , 2013
ISBN	9781447150701 1447150708
Edizione	[1st ed. 2013.]
Descrizione fisica	1 online resource (XII, 216 p. 4 illus.)
Collana	Lecture Notes in Control and Information Sciences, , 0170-8643 ; ; 439
Disciplina	629.8
Soggetti	Automatic control Probabilities System theory Control and Systems Theory Probability Theory and Stochastic Processes Systems Theory, Control
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di contenuto	Time-delay Systems: H-infinity Control and General-type Filtering -- Reduced-order H-infinity Output-feedback Control -- Tracking Control with Preview -- H-infinity Control and Estimation of Retarded Linear Discrete-time Systems -- H-infinity-like Control for Nonlinear Stochastic Systems -- Nonlinear Systems: H-infinity-type Filtering --

Nonlinear Systems: Measurement Output-feedback Control -- H_2 -gain and Robust State-feedback Control of Discrete-time Nonlinear Stochastic Systems -- H_∞ Output-feedback Control of Discrete-time Systems -- H_∞ Control of Stochastic Switched Systems with Dwell Time -- Robust L_∞ -induced Control and Filtering -- Applications.

Sommario/riassunto

Advanced Topics in Control and Estimation of State-Multiplicative Noisy Systems begins with an introduction and extensive literature survey. The text proceeds to cover solutions of measurement-feedback control and state problems and the formulation of the Bounded Real Lemma for both continuous- and discrete-time systems. The continuous-time reduced-order and stochastic-tracking control problems for delayed systems are then treated. Ideas of nonlinear stability are introduced for infinite-horizon systems, again, in both the continuous- and discrete-time cases. The reader is introduced to six practical examples of noisy state-multiplicative control and filtering associated with various fields of control engineering. The book is rounded out by a three-part appendix containing stochastic tools necessary for a proper appreciation of the text: a basic introduction to nonlinear stochastic differential equations and aspects of switched systems and peak to peak optimal control and filtering. Advanced Topics in Control and Estimation of State-Multiplicative Noisy Systems will be of interest to engineers engaged in control systems research and development to graduate students specializing in stochastic control theory and to applied mathematicians interested in control problems. The reader is expected to have some acquaintance with stochastic control theory and state-space-based optimal control theory and methods for linear and nonlinear systems.
