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Nota di contenuto	Introduction -- Preliminaries: modeling, communication scheme and lemmas for NCSs -- Part I Communication-delay-distribution-dependent method NCSs -- Delay distribution dependent control for networked linear control systems -- Delay distribution dependent control for networked Takagi-Sugeno fuzzy systems -- Decentralized

control for IP-based large-scale systems -- Part II Necessary communication based method for control design of NCSs -- H¥ filtering for NCSs with an adaptive event-triggering communication -- Co-design of event-triggered communication scheme and H¥ controller for NCSs -- Self-triggered sampling scheme for NCSs -- A mixed sampling scheme for wireless networked control systems -- Event-triggered control for networked Takagi-Sugeno fuzzy systems.

Sommario/riassunto

This book reports on the latest advances in the study of Networked Control Systems (NCSs). It highlights novel research concepts on NCSs; the analysis and synthesis of NCSs with special attention to their networked character; self- and event-triggered communication schemes for conserving limited network resources; and communication and control co-design for improving the efficiency of NCSs. The book will be of interest to university researchers, control and network engineers, and graduate students in the control engineering, communication and network sciences interested in learning the core principles, methods, algorithms and applications of NCSs.