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Nota di contenuto	Introduction -- Fundamental Limitations of Networked Systems over Fading Channels -- Event-based H Consensus Control of Multi-agent Systems -- Event-Triggered Resilient Filtering with Measurement Quantization -- Event-based Distributed Filtering of Continuous-time Nonlinear Systems -- Event-based Distributed Filtering over Markovian Switching Topologies -- Event-based Recursive Distributed Filtering -- A Resilient Approach to Distributed Recursive Filter Design -- Consensus-based Recursive Distributed Filtering -- On Kalman-Consensus Filtering with Random Link Failures -- Moving-Horizon Estimation with Binary Encoding Schemes -- Conclusion and Further Work.
Sommario/riassunto	Stochastic Control and Filtering over Constrained Communication Networks presents up-to-date research developments and novel methodologies on stochastic control and filtering for networked systems under constrained communication networks. It provides a framework of optimal controller/filter design, resilient filter design,

stability and performance analysis for the systems considered, subject to various kinds of communication constraints, including signal-to-noise constraints, bandwidth constraints, and packet drops. Several techniques are employed to develop the controllers and filters desired, including: recursive Riccati equations; matrix decomposition; optimal estimation theory; and mathematical optimization methods. Readers will benefit from the book’s new concepts, models and methodologies that have practical significance in control engineering and signal processing. Stochastic Control and Filtering over Constrained Communication Networks is a practical research reference for engineers dealing with networked control and filtering problems. It is also of interest to academics and students working in control and communication networks.