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Sommario/riassunto	The book introduces novel algorithms for designing fault-tolerant control (FTC) systems using the behavioral system theoretic approach, and presents a demonstration of successful novel FTC mechanisms on several benchmark examples. The authors also discuss a new transient management scheme, which is an essential requirement for the implementation of active FTC systems, and two data-driven methodologies that are broadly classified as active FTC systems: the projection-based approach and the online-redesign approach. These algorithms do not require much a priori information about the plant in real-time, and in addition this novel implementation of active FTC systems circumvents various weaknesses induced by using a diagnostic module in real-time. The book provides graduate students taking masters and doctoral courses in mathematics, control, and electrical engineering an excellent stepping-stone for their research. It also appeals to practitioners interested to apply innovative fail-safe control techniques.