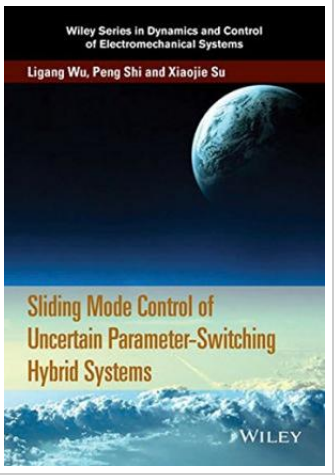

Sliding Mode Control of Uncertain Parameter-Switching Hybrid Systems (Hardback)

By Ligang Wu, Peng Shi, Xiaojie Su

John Wiley Sons Inc, United States, 2014. Hardback. Book Condition: New. 246 x 172 mm. Language: English . Brand New Book. In control theory, sliding mode control (SMC) is a nonlinear control method that alters the dynamics of a nonlinear system by application of a discontinuous control signal that forces the system to slide along a cross-section of the system s normal behaviour. In recent years, SMC has been successfully applied to a wide variety of practical engineering systems including robot manipulators, aircraft, underwater vehicles, spacecraft, flexible space structures, electrical motors, power systems, and automotive engines. Sliding Mode Control of Uncertain Parameter-Switching Hybrid Systems addresses the increasing demand for developing SMC technologies and comprehensively presents the new, state-of-the-art sliding mode control methodologies for uncertain parameter-switching hybrid systems. It establishes a unified framework for SMC of Markovian jump singular systems and proposes new SMC methodologies based on the analysis results. A series of problems are solved with new approaches for analysis and synthesis of switched hybrid systems, including stability analysis and stabilization, dynamic output feedback control, and SMC. A set of newly developed techniques (e.g. average dwell time, piecewise Lyapunov function, parameter-dependent Lyapunov function, cone complementary linearization) are exploited to handle...

Reviews

The book is great and fantastic. Better then never, though i am quite late in start reading this one. I realized this publication from my dad and i advised this ebook to find out.

-- ***Dr. Blair Mann***

Extensive guideline! Its this kind of very good study. It really is full of knowledge and wisdom I discovered this book from my i and dad encouraged this publication to understand.

-- ***Mr. Jerry Littel***