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Sommario/riassunto	This book embarks on a journey through the captivating universe of cellular automata and discover its distinct realm, characterised by

discrete time, space, and states, where cells form regular patterns and offer insights into complex systems across various domains. From theoretical foundations to practical applications, each chapter unveils innovative ideas and implementations, from solving initial value problems to exploring reversible computing and real-time pattern generation. Explore hyperbolic spaces, analyse elementary automata, and delve into network growth dynamics. Shedding light on synchronisation, control, and computational structures, this book is an invaluable resource for computer scientists, modellers, mathematicians, engineers, physicists, and professionals across disciplines. Immerse yourself in the intricate complexities and boundless potential of cellular automata, whether unravelling pedestrian dynamics or exploring cryptographic applications.