《细胞式神经网络的通用性与新兴计算UN》

图书基本信息

书名：《细胞式神经网络的通用性与新兴计算UNIVERSALITY AND EMERGENT COMPUTATION IN CELLULAR NEURAL NETWORKS》

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内容概要

Cellular computing is a natural information processing paradigm, capable of modeling various biological, physical and social phenomena, as well as other kinds of complex adaptive systems. The programming of a cellular computer is in many respects similar to the genetic evolution in biology, the result being a proper cell design and a task-specific gene.How should one "program" the cell of a cellular computer such that a dynamic behavior with computational relevance will emerge? What are the "rules" for designing a computationally universal and efficient cell? The answers to those questions can be found in this book. It introduces the relatively new paradigm of the cellular neural network from an original perspective and provides the reader with the guidelines for understanding how such cellular computers can be "programmed" and designed optimally. The book contains numerous practical examples and software simulators, allowing readers to experiment with the various phases of designing cellular computers by themselves.

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