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Chapter 16. Self-reference and paradox in two and three dimensionsChapter 17. Visualizing the effects of filtering chaotic signals; Chapter 18. Oscillating iteration paths in neural networks learning; Chapter 19. The crying of fractal batrachion 1,489; Chapter 20. Evaluating pseudo-random number generators; Part III: Cellular Automata, Gaskets, and Koch Curves; Chapter 21. Sensitivity in cellular automata: some examples; Chapter 22. One tub, eight blocks, twelve blinkers and other views of life; Chapter 23. Scouts in hyperspace; Chapter 24. Sierpinski fractals and GCDs
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Sommario/riassunto

These days computer-generated fractal patterns are everywhere, from squiggly designs on computer art posters to illustrations in the most serious of physics journals. Interest continues to grow among scientists and, rather surprisingly, artists and designers. This book provides visual demonstrations of complicated and beautiful structures that can arise in systems, based on simple rules. It also presents papers on seemingly paradoxical combinations of randomness and structure in systems of mathematical, physical, biological, electrical, chemical, and artistic interest. Topics include: iteratio