Cellular Neural Networks and Visual Computing

Cellular Nonlinear/neural Network (CNN) technology is both a revolutionary concept and an experimentally proven new computing paradigm. Analogic cellular computers based on CNNs are set to change the way analog signals are processed and are paving the way to an entire new analog computing industry.

This unique undergraduate-level textbook includes many examples and exercises, including CNN simulator and development software accessible via the Internet. It is an ideal introduction to CNNs and analogic cellular computing for students, researchers, and engineers from a wide range of disciplines. Although its prime focus is on visual computing, the concepts and techniques described in the book will be of great interest to those working in other areas of research, including modeling of biological, chemical, and physical processes.

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Cellular neural networks and visual computing
Foundation and applications

Leon O. Chua

and

Tamás Roska
To our wives, Diana and Zsuzsa
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