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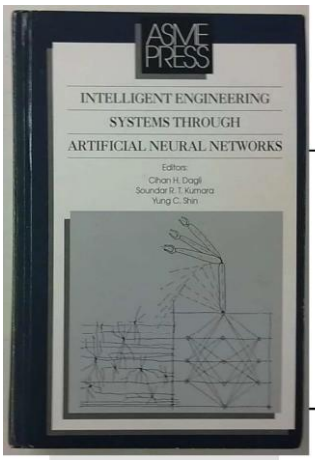
Y. Lu and C. D. Thomborson



Intelligent Engineering Systems Through Artificial Neural Networks - Proceedings of the Artificial Neural Networks in Engineering (ANNIE '91) conference, held November 10-13, 1991, in St. Louis, Missouri, U.S.A.

Editor:Cihan H. Dagli, Soundar R.T. Kumara, Yung C. Shin

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Abstract

We propose a novel gate array global router utilizing a Hopfield Neural Network. Our approach represents each net's potential paths as neurons in a matrix, with the goal of minimizing wire length and channel congestion. By defining an energy function that reflects these objectives, our neural network simulator effectively routes sample gate arrays. These promising results indicate the potential of our method for future applications.

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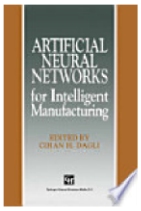

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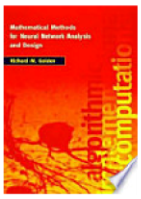

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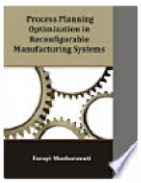

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