

# A REVISIT TO HOPFIELD MODEL IN TSP

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## Abstract

The Hopfield Model is known to be well suited for optimization problems. However, the complexity and difficulty in applying a Hopfield model to optimization problems stem from specifying correctly the interconnection weights and identifying the proper global energy function and motion of equation to drive the network evolution process.

It is also known that the Hopfield model can not always generate feasible solution in TSP. In this paper relationships among parameters are derived that enforces the feasibility of configurations of the Hopfield model in TSP by analyzing the energy function and its behavior. The values of these parameters turn out to be insensitive to the problem size.