A STUDY TO IMPROVE A LEARNING ALGORITHM OF NEURAL NETWORKS

Cong Huu Nguyen*1, Thanh Nga Thi Nguyen2, Ngoc Van Dong3

TÓM TẮT:

Since the last mid- twentieth century, the study of optimization algorithms, especially on the development of digital computers, is increasingly becoming an important branch of mathematics. Nowadays, those mathematical tools are practically applied to neural networks training. In the process of finding an optimal algorithm to minimize the convergence time of the solution or avoiding the weak minima, local minima, the problems are starting to study the characteristics of the error surface. For the complex error surface as cleft-error surface, that its contours are stretched, bent forming cleft and cleft shaft, the old algorithms can not be settled. This paper proposes an algorithm to improve the convergence of the solution and the ability to exit from undesired areas on the error surface.