Abstract

This paper describes parallel implementation of an artificial neural network training algorithm and its effectiveness when applied to performing cryptographic functions. As a cryptographic function, permutations have been used because of its prevalence in complex cryptographic functions such as block ciphers. In order to enhance performance of artificial neural network training algorithm, a method of backward propagation of errors has been parallelized.

References


Index Terms

Computer Science

Artificial Intelligence

Keywords

Neural network; training algorithm; parallelism; cryptography