

A survey on cycles embeddings in Fibonacci and extended Fibonacci cubes

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ABSTRACT.

The Fibonacci and extended Fibonacci cubes are two topologies used for interconnection networks in distributed systems, inspired by the Fibonacci numbers. The possibility of embedding basic interconnection topologies in Fibonacci and extended Fibonacci cubes is an important issue that defines the properties of these topologies. In this paper we give a survey on the property of the existence of a Hamiltonian cycle in Fibonacci and extended Fibonacci cubes, property which is very important, especially in the presence of faulty links when a reconfiguration of the network can be necessary.

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