Abstract

This paper is concerned with routing of data in an embedded hypercube interconnection using the approach based on neural net architecture. To present a framework of the interconnection network consist number of nodes and number of connections. In this paper we first show that n dimensional hypercube can be embedded in layer neural layer network such that for any node of hypercube, its neighboring nodes of other layer are evenly partition into layers where each layer shares a manipulating or resulting data of different layers. Under this embedding network to fixed target and varying data input to produce output of the two incidence matrix of k-ary n-cube network to embedded in architecture.

References

- Kim Jong-Seok, Lee Hyeong-Ok and Heo Yeong-Nam, "Embedding among
HCN(n,n), HFN(n,n) and hypercube; Proceedings of Eighth International conference on parallel and distributed systems (ICPADS)-2001 pp 533 – 540, 26-29 June 2001.


- Yihua Liao, Neural Networks in Hardware: A Survey.

- C. M. Bishop, Neural Networks for Pattern Recognition; Claren- don Press, Oxford, 1995.


**Index Terms**

Computer Science

Networks
Keywords

Hypercube network  Parameters  Embedded network  Layered network  Mean square error

Performance

Validation

Scalability

MIPS

Neurons.