

NEUCOMP2 - parallel neural network compiler

ABSTRACT

A parallel neural network compiler (NEUCOMP2) for a shared-memory parallel machine has been implemented by introducing parallelism in NEUCOMP. The parallel routine detects the program loops of the sequential version generated by NEUCOMP, undergoing analysis of the data dependences and transforms it into a parallel version. Experiments were carried out to study the performance of the NEUCOMP2 programs for the backpropagation network. NEUCOMP2 was developed and run on the Sequent Balance 8000 computer system at Parallel Algorithm Research Centre, U.K.

Keyword: Backpropagation network; NEUCOMP; NEUCOMP2; Neural network simulation program; Sequent Balance 8000; Shared-memory parallel machine