Abstract

In this paper a hardware implementation of a neural network NN using Field Programmable Gate Arrays (FPGA) is presented. A digital system architecture is designed to realize a feed forward multilayer neural network. The designed architecture is described using Very High Speed Integrated Circuits Hardware Description Language (VHDL) and implemented in an FPGA chip. The design is verified on an FPGA demo board Xilinx Spartan.

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Index Terms

Computer Science & Networks

Keywords

FPGA, VHDL, NN.