

Abstract

The project of "FPGA Based signal processing for Ultrasonographic Imaging System" is basically first initiative to develop this system in India itself, because of its high cost and hug use. FPGA Implementation because of its reconfigurability. The expected duration of this project is around two year.

Ultrasonic have a large number of applications, which are mainly, divided into two major categories, high intensity applications & low intensity applications. Here we-are mainly looking for Medical applications.

There are number of modules of this complete system and I am doing work in some modules.

Some of the algorithm used in image processing usually implemented in software but may also be implemented in special purpose hardware for reduce speed.

In present work I am implementing canny edge detection algorithms using reconfigurable architecture & Hardware modeled will be implemented using the Xilinx ISE 7.01 tool on the XC2VP7 (or XC2V1000) vertex Embedded Development Board.

The algorithm will be tested on standard image processing benchmarks and if the time wills remains I will do comparison of these algorithms with other edge detection algorithm like sober