

Object: Sobel Edge Detection Algorithm Overview

Input: Color Image (24-bit BMP)

Output: Sobel Processed Image (24-bit BMP)

Flow:

Step 1: Read Bmp Image

Step 2: Convert RGB to Gray

Step 3: Sobel Processing used the gray image as input

Step 4: Processed Result Gray Image(R=G=B=GRAY)

Reference:

- 1 Zynq All Programmable SoC Sobel Filter Implementation Using the Vivado HLS Tool(2-3)
- 2 Image+Processing+Fundamentals(63)
- 3 img_filter.c img_filter.h