

ABSTRACT

Abnormalities The spine is a part of the human body that continues to be active and developing, the spine can give shape to the human body. The spinal deformity measurement system is a technology that continues to be developed to assist in the diagnosis and treatment of spinal diseases. However, traditional spine measurements have several disadvantages, such as cost and time.

In this final project, a system for measuring spinal abnormalities using a camera is developed. The image of the object was captured with the Kinect xbox 360 camera so that the appearance of the slope of the bones in the human body appears.

The development of a system for measuring spinal abnormalities using a camera can improve diagnostic accuracy and reduce discomfort. Testing can be done by taking data from people with various different spines.

The research results are based on system descriptions and test scenarios 1,2,3 to 10 tests with 2 front and rear frames where each frame contains 10 test result data, namely with the average value of 1 front test 32 and 15 rear, 2 front tests -13 and rear 31, test 3 front -16 and rear, test 4 front 19 and rear 11, test 5 front -22 and rear -8, test 6 front -26 and rear -15, test 7 front 9 and rear 35, test 8 front 7 and back 8, test 9 front 8 and back 18, test 10 front -20 and back -26 there is a change in the tilt angle of the front and back with the average value of the tilt angle, followed by calculations intended to calculate the tilt of the spine by using X and Y accuracy when capturing data via the Xbox 360 Kinect camera.

Keywords: Kinect camera, System, Spine, Tilt angle