

Exhaustive Block Matching Tutorial Exercise

Exercise

Consider a grayscale video, with frame size of 720×480 *pixels*. Estimate the computations required by an integer-pel Exhaustive Block Matching Algorithm (*EBMA*) with block size 16×16 , assuming that the maximum motion range is ± 32 pixels and that the blocks do not overlap. Consider that each operation includes one subtraction, one absolute value computation, and one addition.