ABSTRACT

Image upscaling is a process to increase the resolution of an image without losing its natural feels. This process tends to consume a lot of computation time and produce an image with low quality. Iterative curvature based interpolation is one of the methods that claims its ability to produce good image with low processing time. The method starts with filling the empty pixels with interpolation and change its value iteratively to increase the quality of the output image. This final project's goal is to prove the ability of the method by analyzing the processing time and output image's quality. Based on the research done in this final project, the PSNR produced by the method from 18.37 to 36.61, on two times enlargement and 15.31 to 30.54 on four times enlargement. Average time that consumed on two times enlargement is 1.48 second or five iteration and 1.65 second for ten iteration, on the other hand four time enlargement consumed 1.66 second for five iteration and 1.77 second for ten iteration

Keywords : *image upscaling, iterative curvature based interpolation, interpolation, super resolution*