DETECTION OF SYMMETRY OF AN OBJECT USING THE FOURIER TRANSFORM

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Abstract: *This article presents a method of determining the vertical axis of symmetry of an object in a digital grayscale image. In order to acheive this result the discrete Fourier Transform was used for approximating symmetry on every line of the image and then linear regression to calculate the equation of the symmetry line. In the end there are some discussions about the applicability of this method in different cases. The method was implemented in a C++ program, using a DFT algorithm [3].*

Keywords: *Symmetry, Fourier Transform, frequencies, Euclidian distance,Lagrange multiplicators, normal vector*

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