

# Iterative approximation of sequences along the maximum of the perimeter and using the triangle inequality

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## Abstract:

The paper describes three proprietary algorithms of iterative approximation, primarily, iterative polygonal approximation of contour chains based on the principle of the maximum perimeter of an approximating polygon. The algorithms are designed to analyze the shape of the contours. A modification is also presented that allows to use these algorithms for iterative approximation of one-dimensional sequences, and that can be used in the analysis of sound and image raster.

**Keywords:** iterative approximation, triangle inequality, maximum perimeter of an approximating polygon, image raster, sound.

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