

# A Limited Precision Method for Determining the Perimeter of a Flat Vector Object Using Bezier Curves

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## Abstract

Plane shapes are one of the broadest domains for electronically stored information. Such vector objects, including texts, routes, etc. are often described using Bezier curves. Many data analysis tasks require determination of the perimeters of vector objects, which is associated with significant computational complexity; however, it is far from always necessary to calculate metrics with high accuracy. In this work, we propose splitting Bezier curves into arcs to reduce dimension. Thus, we quickly compute the perimeter of an arbitrary flat figure with limited precision.

## Hosted file

Tarasov1\_Bezier\_perimeters1.pdf available at <https://authorea.com/users/360082/articles/487919-a-limited-precision-method-for-determining-the-perimeter-of-a-flat-vector-object-using-bezier-curves>





