Bezier curves for solving Fredholm integral equations of the second kind

ABSTRACT

The Bezier curves are presented to estimate the solution of the linear Fredholm integral equation of the second kind. A direct algorithm for solving this problem is given. We have chosen the Bezier curves as piecewise polynomials of degree n and determine Bezier curves on [0, 1] by n + 1 control points. Numerical examples illustrate that the algorithm is applicable and very easy to use.