عنوان مقاله:

Generalized B-spline functions method for solving optimal control problems

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خلاصه مقاله:

In this paper we introduce a numerical approach that solves optimal control problems (OCPs) using collocation methods. This approach is based upon B-spline functions. The derivative matrices between any two families of B-spline functions are utilized to reduce the solution of OCPs to the solution of nonlinear optimization problems. Numerical experiments confirm our heoretical findings.

کلمات کلیدی:

Optimal control problem, B-spline functions, Derivative matrix, Collocation method