Successive over relaxation method in solving two-point fuzzy boundary value problems

Abstract

In this study, numerical methods are considered in solving the fuzzy boundary value problem (FBVP). This boundary value problem will then be discretized to derive second order finite difference equation and hence generated fuzzy linear system. The approximation solver towards system of linear equations is described through the implementation of the Gauss-Seidel (GS) and Successive Over Relaxation (SOR) iterative methods. Then several numerical experiments were shown to illustrate the effectiveness of SOR iterative method compared with the GS method.