

## عنوان مقاله:

ANALYSIS OF WATER DISTRIBUTION NETWORKS USING GENETIC ALGORITHM

## محل انتشار:

نهمین کنگره بین المللی مهندسی عمران (سال: 1391)

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## خلاصه مقاله:

The analysis of a water distribution network requires the solution of a set of nonlinear equations. There are various techniques such as Hardy Cross method, Newton-Raphson method, linear theory, and Global Gradient algorithm for solving these nonlinear equations. In this article the application of Genetic Algorithm is presented for flow analysis in pipe networks. Thereby the problem is reformulated as an optimization problem where energy conservation equations are incorporated in an objective function and mass conservation equations as constraints. The proposed method is successfully applied to two example networks. The pipe flow rates are identical with the GGA results to three digits after decimals

## کلمات کلیدی:

Genetic Algorithm, Water Distribution Networks, Optimization

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/165606>

