

عنوان مقاله:

یک مدل شبکه عصبی بازگشتی برای حل برنامه ریزی خطی نیمه معین

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نویسندگان:

S. M. Mirhosseini Alizamini - *Department of Mathematics, Payame Noor University, Tehran, Iran*

A. Malek - *Department of Applied Mathematics, faculty of Mathematical Sciences, Tarbiat Modares University, Tehrasn, Iran*

Gh. Ahmadi - *Department of Mathematics, Payame Noor University, Tehran, Iran*

خلاصه مقاله:

In this paper we solve a wide rang of Semidefinite Programming (SDP) Problem by using Recurrent Neural Networks (RNNs). SDP is an important numerical tool for analysis and synthesis in systems and control theory. First we reformulate the problem to a linear programming problem, second we reformulate it to a first order system of ordinary differential equations. Then a recurrent neural network model is proposed to compute related primal and dual solutions simultaneously. Illustrative examples are included to demonstrate the validity and applicability of the technique.

کلمات کلیدی:

Semidefinite Programming, Primal-dual problems, Recurrent Neural Network

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