Accepted Manuscript

The Resource Dependent Assignment Problem with a Convex Agent Cost Function

Liron Yedidsion, Dvir Shabtay

PII: S0377-2217(17)30183-2
DOI: 10.1016/j.ejor.2017.03.004
Reference: EOR 14281

To appear in: *European Journal of Operational Research*

Received date: 9 December 2015
Revised date: 13 February 2017
Accepted date: 1 March 2017

Please cite this article as: Liron Yedidsion, Dvir Shabtay, The Resource Dependent Assignment Problem with a Convex Agent Cost Function, *European Journal of Operational Research* (2017), doi: 10.1016/j.ejor.2017.03.004

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

ACCEPTED MANUSCRIPT

Highlights

- We study the Resource Dependent Assignment Problem with a convex agent cost function.
- The problem has important applications in deterministic scheduling.
- We prove that three variations are NP-hard, while a single variation is not.
- We design a novel approximation algorithm for an NP-hard variation of the problem.
- The approximation ratio is very tight for any practical problem.

ACCEPTED MANUSCRIPT

Download English Version:

https://daneshyari.com/en/article/4959634

Download Persian Version:

https://daneshyari.com/article/4959634

Daneshyari.com