Accepted Manuscript

Polynomial kernels for weighted problems

Michael Etscheid, Stefan Kratsch, Matthias Mnich, Heiko Röglin

PII: S0022-0000(16)30046-0
DOI: http://dx.doi.org/10.1016/j.jcss.2016.06.004
Reference: YJCSS 2993

To appear in: *Journal of Computer and System Sciences*

Received date: 4 January 2016
Accepted date: 19 June 2016

Please cite this article in press as: M. Etscheid et al., Polynomial kernels for weighted problems, *J. Comput. Syst. Sci.* (2016), http://dx.doi.org/10.1016/j.jcss.2016.06.004

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.

Highlights

- We use a technique by Frank and Tardos (Combinatorica 1987) to settle an open problem in kernelization.
- We present a polynomial kernelization for Knapsack parameterized by number of items.
- The method can be generally used to obtain polynomial kernels for weighted problems.
- We give kernels for e.g. Subset Sum, Weighted d-Hitting Set, and ILP with bounded variables.

Download English Version:

https://daneshyari.com/en/article/4951251

Download Persian Version:

https://daneshyari.com/article/4951251

Daneshyari.com