

Erratum to: Discussions on Hirsch Conjecture and Existence of Strongly Polynomial-time Simplex Variants

Pei-Zhuang Wang

Published online: 16 October 2014
© Springer-Verlag Berlin Heidelberg 2014

Erratum to: Ann. Data. Sci. (2014) 1(1):41–71
DOI 10.1007/s40745-014-0005-9

In the original published version of this article, several errors are unfortunately found. The illustrations and corrections of these errors are listed as below:

1. Title

Discussions on Hirsch Conjecture and The Existence of Strongly Polynomial-time Simplex Variants

Correction:

Discussions on Hirsch Conjecture and Existence of Strongly Polynomial-time Simplex Variants

2. The row of Example 4.1 in page 59:

Example 4.1. Given ${}^0\mathbf{g} = -\mathbf{b}^T = (-4, -1, -4, -6, -2)$, $F_0 = (7, 4, 7, 6, 5) \in$

Correction:

Example 4.1. Given ${}^0\mathbf{g} = -\mathbf{b}^T = (-4, -1, -4, -6, -2)$, $F_0 = (7, 4, 7, 9, 5) \in$

3. The rows from second row to fifth row, under the tableau in page 66:

$k = 0$. $\Delta = \emptyset$, there is no door at $F_0 = (7, 4, 7, 6, 5)$, go to Step 3,

The online version of the original article can be found under doi:[10.1007/s40745-014-0005-9](https://doi.org/10.1007/s40745-014-0005-9).

P.-Z. Wang (✉)
College of Science, Liaoning Engineering Technology Univ.,
Liaoning 123000, Fuxin, China
e-mail: peizhuangw@126.com

P.-Z. Wang
Research Center of Fictitious Economy and Data Science,
Chinese Academy of Sciences, Beijing 100080, China

Step 3 Getting next stage point and the door cone C_1 :

$$\begin{aligned} F_1 = F_{k+1} &= \text{NextStagePoint}(F_k, \underline{\mathbf{g}}_{\downarrow \dots (k)}) \\ &= \text{NextStagePoint}(F_0, {}^0\mathbf{g}) = (3, 3, 3, 3); \end{aligned}$$

Correction:

$k = 0, \Delta = \emptyset$, there is no door at $F_0 = (7, 4, 7, 9, 5)$, go to Step 3,

Step 3 Getting next stage point and the door cone C_1 :

$$\begin{aligned} F_1 = F_{k+1} &= \text{NextStagePoint}(F_k, \underline{\mathbf{g}}_{\downarrow \dots (k)}) \\ &= \text{NextStagePoint}(F_0, {}^0\mathbf{g}) = (3, 3, 3, 3, 3); \end{aligned}$$