Computational Optimization and Applications (2019) 74:315–316
https://doi.org/10.1007/s10589-019-00108-7

CORRECTION

Correction to: Convergence rate for a Radau hp collocation method applied to constrained optimal control

William W. Hager[1] · Hongyan Hou[2] · Subhashree Mohapatra[3,4] · Anil V. Rao[5] · Xiang-Sheng Wang[6]

Published online: 16 May 2019
© Springer Science+Business Media, LLC, part of Springer Nature 2019

Correction to: Computational Optimization and Applications https://doi.org/10.1007/s10589-019-00100-1

The original version of this article unfortunately contained an error in two equations on page 25, inside the proof of Proposition 6.1. The sentences containing the corrected equations are presented below:

Equating to zero the derivative of the Lagrangian with respect to $\mathbf{X}_{kj}$, $1 \le j < N$, yields the relation

$$\sum_{i=1}^{N} D_{ij}\boldsymbol{\lambda}_{ki} = h\Big[\mathbf{A}_{kj}^{\mathsf{T}}\boldsymbol{\lambda}_{kj} + \omega_j(\mathbf{Q}_{kj}\mathbf{X}_{kj} + \mathbf{S}_{kj}\mathbf{U}_{kj})\Big] + \omega_j \mathbf{y}_{3kj}.$$

Equating to zero the derivative of the Lagrangian with respect to $\mathbf{X}_{kN}$ yields the relation

$$\sum_{i=1}^{N} D_{iN}\boldsymbol{\lambda}_{ki} = h\Big[\mathbf{A}_{kN}^{\mathsf{T}}\boldsymbol{\lambda}_{kN} + \omega_N(\mathbf{Q}_{kN}\mathbf{X}_{kN} + \mathbf{S}_{kN}\mathbf{U}_{kN})\Big] + \omega_N \mathbf{y}_{3kN} + \boldsymbol{\lambda}_{k+1,0},$$

where $\boldsymbol{\lambda}_{K+1,0} = \mathbf{T}\mathbf{X}_{KN} + \mathbf{y}_5$.

The original article has been corrected.

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

The original article can be found online at https://doi.org/10.1007/s10589-019-00100-1.

✉ William W. Hager
hager@ufl.edu
http://people.clas.ufl.edu/hager/

Extended author information available on the last page of the article

Affiliations

William W. Hager[1] · Hongyan Hou[2] · Subhashree Mohapatra[3,4] · Anil V. Rao[5] · Xiang-Sheng Wang[6]

Hongyan Hou
hongyan.hou@mnstate.edu

Subhashree Mohapatra
subhashree3mohapatra@gmail.com

Anil V. Rao
anilvrao@ufl.edu
http://www.mae.ufl.edu/rao

Xiang-Sheng Wang
xswang@louisiana.edu
http://www.ucs.louisiana.edu/~xxw6637/

1 Department of Mathematics, University of Florida, P.O. Box 118105, Gainesville, FL 32611-8105, USA

2 Mathematics Department, Minnesota State University Moorhead, 1104 7th Avenue South, P.O. Box 104, Moorhead, MN 56563, USA

3 Department of Mathematics, University of Florida, Gainesville, FL 32611, USA

4 Present Address: Department of Mathematics, SRM Institute of Science and Technology, Kattankulathur 603203, India

5 Department of Mechanical and Aerospace Engineering, University of Florida, P.O. Box 116250, Gainesville, FL 32611-6250, USA

6 Department of Mathematics, University of Louisiana at Lafayette, Lafayette, LA 70503, USA