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ACADEMIC APPOINTMENTS

2010 – present, *Professor*, Business School, Worcester Polytechnic Institute

2003 – 2010, *Associate Professor*, Department of Management, Worcester Polytechnic Institute

1998 – 2003, *Assistant Professor*, Department of Management, Worcester Polytechnic Institute

VISITING POSITIONS

2017-2018, *Feng Tay Chair Professor*, National Yunlin University of Science and Technology, Taiwan.

2015-2017, *Chang Jiang Scholar Chair Professor*, Ministry of Education of China, hosted by Hefei University of Technology, Hefei, China.

2014-present, *Distinguished Professor*, Nanjing Audit University, Nanjing, China.

June-July, 2010, *William Evans Visiting Fellow*, Department of Finance & Quantitative Analysis, University of Otago, Dunedin, New Zealand.

May-June, 2007, *Visiting Research Fellow*, Graduate School of Information Science and Technology, Osaka University, Japan.

2007, *Visiting Associate Professor*, Department of Industrial and Information Management, the National Cheng Kung University, Taiwan.

May-July, 2002, *Japan Society for Promotion of Science (JSPS) Fellow*, Graduate School of Information Science and Technology, Osaka University, Japan.

EDITORIAL EXPERIENCE

- Editor-in-Chief, *OMEGA*, (2025 – present)
- Area Editor, *INFOR*, (2024 – present)

- Editorial Board Member, *European Journal of Operational Research* (2014 – present)
- Associate Editor, *Journal of the Operational Research Society*, (2017 – present)
- Deputy Editor, *OMEGA*, (2019 – 2024)
- Associate Series Editor, **Springer** *International Series on Operations Research and Management Sciences*, (2014 – present)
- Editorial Board Member, *Computers & Operations Research* (2005 – present)
- Editor, *Data Envelopment Analysis Journal*, (2013 – present)
- Associate Editor, *Asia-Pacific Journal of Operational Research* (2004 – 2008)
- Deputy Editor, *OMEGA*, (2019 – 2024)
- Area Editor, *OMEGA*, (2008 – 2024)
- Associate Editor, *OMEGA*, (2004 – 2008)
- Associate Editor, *INFOR*, (2007 – 2024)
- Guest Editor, *Annals of Operations Research*, *European Journal of Operational Research*, *Journal of the Operational Research Society*, *International Journal of Information Technology and Decision Making*, *OMEGA*, *Journal of CENTRUM Cathedra*

EDUCATION

Ph.D., Industrial Engineering & Operations Research
University of Massachusetts at Amherst, 1998

M.S., Systems Engineering
Southeast University, China, 1992

PUBLICATIONS IN REFERRED JOURNALS

169. Khezrimotlagh, D., Shvartsman, I., and Zhu, Joe, A single two-stage network DEA model ensuring simultaneous feasibility and interpretable efficiency measurement, *Journal of the Operational Research Society*, in press.
168. An, Q., Zhao, J., and Zhu, Joe, Data envelopment analysis clustering: an optimization based machine learning, *Journal of the Operational Research Society*, in press.
167. Wang, Z., Yang, M., Liang, L., and Zhu, Joe, A nonparametric least-squares model in network data envelopment analysis, *European Journal of Operational Research*, in press.

166. Keskin, B., Zhu, Joe, and Yu, A., Performance analysis of sustainable development goals: A multi-component additive network DEA approach, *Journal of the Operational Research Society*, Volume 76 (2025), No. 9, 1749-1764.
165. Khezrimotlagh, D., and Zhu, Joe, Implementing no free disposability in data envelopment analysis, *European Journal of Operational Research*, Vol. 322 (2025), Issue 3, 978-992.
164. Shi, Y., Zhu, Joe, and Charles, V., Bank financial sustainability evaluation: data envelopment analysis with random forest and Shapley additive explanations, *European Journal of Operational Research*, Vol. 321 (2025), Issue 2, 614-630.
163. Chu, J., Rui, Y., Khezrimotlagh, D., and Zhu, Joe, A General Computational Framework and A Hybrid Algorithm for Large-scale Data Envelopment Analysis, *European Journal of Operational Research*, Vol. 316 (2024), Issue 2, 639-650.
162. Geri L. Dimas, G.L., Khalkhali, M. E., Bender, A., Maass, K.L., Konrad, R.A., Blom, J.S. Zhu, Joe, and Trapp, A.C., Estimating effectiveness of identifying human trafficking via data envelopment analysis, *INFORMS Journal on Applied Analytics*, Vol. 56 (2023), No. 6, 408-424.
161. Khezrimotlagh, D., and Zhu, Joe, The role of unobserved units in two-stage network data envelopment analysis, *Journal of the Operational Research Society*, Vol. 74 (2023), No. 5, 1275–1285.
160. Esteve, M., Aparicio, J., Rodriguez-Sala, J.J., and Zhu, Joe, Random forests and the measurement of super-efficiency in the context of free disposal hull, *European Journal of Operational Research*, Vol. 304 (2023), Issue 2, 729-744.
159. Khezrimotlagh, D., and Zhu, Joe, Multivariate returns to scale production frontiers, *Journal of the Operational Research Society*, Vol. 73 (2022), No. 6, 1411–1419.
158. Liu, J., Gong, Y., Zhu, Joe, and Titah, R., Information technology and performance: Integrating data envelopment analysis and configurational approach, *Journal of the Operational Research Society*, Vol. 73 (2022), No. 6, 1278–1293.
157. Khezrimotlagh, D., Kaffash, S., and Zhu, Joe, U.S. airlines mergers' performance and productivity change, *Journal of Air Transport Management*, Volume 102 (2022), July, 102226.
156. Zhu, Joe, DEA under big data: data enabled analytics and network data envelopment analysis, *Annals of Operations Research*, Vol. 309, (2022), Issue 2, 761-783.
155. Sahoo, B.K., Saleh, H., Shafiee, M., Kaoru Tone, T. and Zhu, Joe, An alternative approach to dealing with the composition approach for series network production processes, *Asia-Pacific Journal of Operational Research*, Vol. 33 (2021), Issue 1-2, 507-528.
154. Shi, Y., Yu, A., Higgins, H., and Zhu, Joe, Shared and unsplitable performance links in network DEA, *Annals of Operations Research*, Vol. 33 (2021), Issue 1-2, 507-528.
153. Khezrimotlagh, D., Cook, W.D., and Zhu, Joe, Number of performance measures versus number of decision making units in DEA, *Annals of Operations Research*, Vol. 33 (2021), Issue 1-2, 529-562.

152. Zhang, Q., Koutmos, D., Chen, K., and Zhu, Joe, Using operational and stock analytics to measure airline performance: network DEA approach, *Decision Sciences*, Vol. 52 (2021), No. 3, 720-748.
151. Chu, J. and Zhu, Joe, Production scale-based two-stage network data envelopment analysis, *European Journal of Operational Research*, Vol. 294, (2021), Issue 1, 283-294.
150. Shi, Y., Zhu, Joe, and Charles, V., Data science and productivity: A bibliometric review of data science applications and approaches in productivity evaluations, *Journal of the Operational Research Society*, Vol. 72 (2021), Issue 5, 975-988.
149. Yu, A., Shi, Y., You, J, and Zhu, Joe, Innovation performance evaluation for high-tech companies using a dynamic network data envelopment analysis approach, *European Journal of Operational Research*, Vol. 292, (2021), Issue 1, 199-212.
148. Kaffash, S., Nguyen, A.T., and Zhu, Joe, Big data algorithms and applications in intelligent transportation system: A review and bibliometric analysis, *International Journal of Production Economics*, Vol. 231 (2021), January, 107868.
147. Li, W., Cook, W.D., Li, Z, and Zhu, Joe, Efficiency measurement for hierarchical situations, *Journal of the Operational Research Society*, Vol. 72 (2020), Issue 3, 654-662.
146. Avilés-Sacoto, S., Cook, W.D., Güemes-Castorena, D., and Zhu, Joe, Measuring efficiency in DEA in the presence of common inputs, *Journal of the Operational Research Society*, Vol. 71 (2020), No. 11, 1710-1722.
145. Chen, C., Cook, W.D., Imanirad, R., and Zhu, Joe, Balancing fairness and efficiency in performance evaluation in non-homogeneous environments: The case of hybrid versus conventional vehicles, *European Journal of Operational Research*, Vol. 287 (2020), Issue 3, 1003-1013.
144. Avilés-Sacoto, S., Cook, W.D., Güemes-Castorena, D., and Zhu, Joe, Modelling efficiency in regional innovation systems: A two-stage data envelopment analysis problem with shared outputs within groups of decision-making units, *European Journal of Operational Research*, Vol. 287 (2020), Issue 2, 572-582.
143. Khezrimotlagh, D., Cook, W.D., and Zhu, Joe, A Nonparametric framework to detect outliers in estimating production frontiers, *European Journal of Operational Research*, Vol. 286 (2020), Issue 1, 375-388.
142. Kaffash, S., Azizi, R., Huang, Y. and Zhu, Joe, A survey of data envelopment analysis applications in the insurance industry 1993-2018, *European Journal of Operational Research*, Vol. 284 (2020), Issue 3, 801-813.
141. Cook, W.D., Li, W-H, Li, Z, Liang, L., and Zhu, Joe, Efficiency measurement with products and partially desirably co-products, *Journal of the Operational Research Society*, Vol. 71 (2020), Issue 2, 335-345.
140. Chen, K., and Zhu, Joe, Additive slacks-based measure: computational strategy and extension to network DEA, *OMEGA*, Vol. 91, March (2020), 102022.
139. Chen, K., Cook, W.D., and Zhu, Joe, A conic relaxation model for searching global optimum of network data envelopment analysis, *European Journal of Operational Research*, Vol. 280, Issue 1 (2020), 242-253.

138. Charles, V., Aparicio, J., and Zhu, Joe, The curse of dimensionality of decision-making units: A simple approach to increase the discriminatory power of data envelopment analysis, *European Journal of Operational Research*, Vol. 279, Issue 3 (2019), 929-940.
137. Chen, Y., Wang, J., Zhu, Joe, Sherman, H.D. and Chou, S-Y, How the great recession affects performance: A case of Pennsylvania hospitals using DEA, *Annals of Operations Research*, Vol. 278, Issue 1-2 (2019), 77-99.
136. Gong, Y., Liu, J., and Zhu, Joe, When to increase firms' sustainable operations for efficiency? A data envelopment analysis in the retailing industry, *European Journal of Operational Research*, Vol. 277, Issue 3 (2019), 1010-1026.
135. Chen, K., and Zhu, Joe, Scale efficiency in two-stage network DEA, *Journal of the Operational Research Society*, Vol. 70, Issue 1 (2019), 101-110.
134. Khezrimotlagh, D., Zhu, Joe, Cook, W.D., and Toloo, M., Data envelopment analysis and big data, *European Journal of Operational Research*, Vol. 274, Issue 3 (2019), 1047-1054.
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132. Cook, W.D., Ramón, N., Ruiz, J.L., Sirvent, I., and Zhu, Joe, Goal-adjusted benchmarking for performance evaluation in pay-for-performance incentive plans, *OMEGA*, Vol. 84 (2019), 45-54.
131. Lim, S., and Zhu, Joe, Primal-dual correspondence and frontier projections in two-stage network DEA models, *OMEGA*, Vol. 83 (2019), 236-248.
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128. He, W., Yang, Y., Wang, Z., and Zhu, Joe, Estimation and allocation of cost savings from collaborative CO2 abatement in China, *Energy Economics*, Vol. 72 (2018), 62-74.
127. Gong, Y., Zhu, Joe, Chen, Y., and Cook, W.D., DEA as a tool for auditing: Application to Chinese manufacturing industry with parallel network structures, *Annals of Operations Research*, Vol. 263 (2018), Issue 1-2, 247-269.
126. Galagedera, D.U.A., Roshdi, I., Fukuyama, H. and Zhu, Joe, A new network DEA model for mutual fund performance appraisal: An application to U.S. equity mutual funds, *OMEGA*, Vol. 77 (2018), 168-179.
125. Mehdiloozad, M., Zhu, Joe, and Sahoo, B., Identification of congestion in data envelopment analysis under the occurrence of multiple projections: A reliable method capable of dealing with negative data, *European Journal of Operational Research*, Vol. 265, Issue 2 (2018), 644-654.

124. Li, H., Chen, C-L, Cook, W.D., Zhang, J., and Zhu, Joe, Two-stage network DEA: Who is the leader? *OMEGA*, Vol. 74 (2018), 15-19.
123. Zhou, H., Yang, Yi., Chen, Y., and Zhu, Joe, Data envelopment analysis application in sustainability: The origins, development and future directions, *European Journal of Operational Research*, Vol. 264, Issue 1 (2018), 1-16.
122. Cook, W.D., Guo, C., Zhu, Joe, Li, W-H, Li, Z., and Liang, L., Efficiency measurement of multistage processes: context dependent numbers of stages, *Asia-Pacific Journal of Operational Research*, Vol. 31, Issue 6 (2017), 1750032 [18 pages].
121. Ding, J-J, Dong, W., Liang, L., and Zhu, Joe, Goal congruence analysis in multi-division organization with shared resources based on data envelopment analysis, *European Journal of Operational Research*, Vol. 263, Issue 3 (2017), 961-973.
120. Chen, Y., Cook, W.D., Du, J., Hu, H. and Zhu, Joe, Bounded and discrete and data and Likert scales in data envelopment analysis: Application to regional energy efficiency in China, *Annals of Operations Research*, Vol. 255, Issue 1-2 (2017), 347-366.
119. Cook, W.D., Du, J., and Zhu, Joe, Units invariant DEA when weight restrictions are present: Ecological performance of US electricity industry, *Annals of Operations Research*, Vol. 255, Issue 1-2 (2017), 323-346.
118. Chen, K, and Zhu, Joe, Second order cone programming approach to two-stage network data envelopment analysis, *European Journal of Operational Research*, Vol. 262, Issue 1 (2017), 231-238.
117. Li, W.H., Liang, L., Aviles-Sacoto, S., Imanirad, R., Cook, W.D., and Zhu, Joe, Modeling efficiency in the presence of multiple partial input to output processes, *Annals of Operations Research*, Vol. 250, Issue 1 (2017), 235-248.
116. Miller, F., Wang, J., Zhu, Joe, Chen, Y., and Hockenberry, J., Investigation of the impact of the Massachusetts health care reform on hospital costs and quality of care, *Annals of Operations Research*, Vol. 250, Issue 1 (2017), 129-146.
115. Guo, C. and Zhu, Joe, Non-cooperative two-stage network DEA model: Linear vs. parametric linear, *European Journal of Operational Research*, Vol. 258, Issue 1 (2017), 398-400.
114. Guo, C., Abbasi Shureshjani, R., Foroughi, A. and Zhu, Joe, Decomposition weights and overall efficiency in two-stage additive network DEA, *European Journal of Operational Research*, Vol. 257, Issue 3 (2017), 896-906.
113. Cook, W.D., Ruiz, J.L., Sirvent, I. and Zhu, Joe, Within-group common benchmarking using DEA, *European Journal of Operational Research*, Vol. 256, Issue 3 (2017), 901-910.
112. Wu, J., Zhu, Q.Y., Cook, W.D., and Zhu, Joe, Best cooperative partner selection and input resource reallocation using DEA, *Journal of the Operational Research Society*, Vol. 67, Issue 9 (2016), 1221-1237
111. Du, J., Huo, J-Z, and Zhu, Joe, Data envelopment analysis with output-bounded data, *Asia-Pacific Journal of Operational Research*, Vol. 33, Number 6 (2016), 1650050 [17 pages].

110. Li, W, Liang, L., Cook, W.D., and Zhu, Joe, DEA models for non-homogeneous DMUs with different input configurations, *European Journal of Operational Research*, Vol. 254, Issue 3 (2016), 946-956.
109. Shwartz, M., Burgess, J.F. Jr, and Zhu, Joe, A DEA based composite measure of quality and its associated data uncertainty interval for health care Provider profiling and pay-for-performance, *European Journal of Operational Research*, Vol. 253, Issue 2 (2016), 489-502.
108. Lim, S., and Zhu, Joe, A note on two-stage network DEA model: frontier projection and duality, *European Journal of Operational Research*, Vol. 248, Issue 1 (2016), 342-346.
107. Aviles-Sacoto, S., Cook, W.D., Imanirad, R., and Zhu, Joe, Two-stage network DEA: When intermediate measures can be treated as outputs from the second stage, *Journal of the Operational Research Society*, Vol. 66, Issue 11 (2015), 1868-1877.
106. Imanirad, R., Aviles-Sacoto, S., Cook, W.D., and Zhu, Joe, Partial input to output impacts in DEA: The case of DMU-specific impacts, *European Journal of Operational Research*, Vol. 244, Issue 3 (2015), 837-844.
105. Du, J., Zhu, Joe, Cook, W.D., and Huo, J-Z, DEA models for parallel systems: game-theoretic approaches, *Asia-Pacific Journal of Operational Research*, Vol. 32, No. 2 (2015), 1550008 (22 pages).
104. Lim, S., and Zhu, Joe, DEA Cross-efficiency evaluation under variable returns to scale, *Journal of the Operational Research Society*, Vol. 66, Issue 3 (2015), 476-487.
103. Du, J., Wang, J., Chen, Y., Chou, S-Y, and Zhu, Joe, Incorporating health outcomes in Pennsylvania hospital efficiency: An additive super-efficiency DEA approach, *Annals of Operations Research*, Vol. 221, Issue 1 (2014), 161-172.
102. Park, J., Lee, D., and Zhu, Joe, An integrated approach for ship block manufacturing process performance evaluation: Case from a Korean shipbuilding company, *International Journal of Production Economics*, Vol. 156 (2014), 214-222.
101. Lim, S., Oh, K.W., and Zhu, Joe, Use of DEA cross-efficiency evaluation in portfolio selection: an application to Korean stock market, *European Journal of Operational Research*, Vol. 236 (2014), 361-368.
100. Du, J., Zhu, W.D., Liang, L., and Zhu, Joe, Fixed cost and resource allocation based on DEA cross-efficiency, *European Journal of Operational Research*, Vol. 235 (2014), 206-214.
99. Cook, W.D., and Zhu, Joe, DEA Cobb-Douglas frontier and cross efficiency, *Journal of the Operational Research Society*, Vol. 65, Issue 2 (2014), 265-268.
98. Cook, W.D., Tone, K., and Zhu, Joe, Data envelopment analysis: Prior to choosing a model, *OMEGA*, Vol. 44 (2014), 1-4.
97. Sahoo, Biresh K., Zhu, Joe, Tone, K., and Klemen, B.M., Decomposing technical efficiency and scale elasticity in two-stage network DEA, *European Journal of Operational Research*, Vol. 233, Issue 3 (2014), 584-594.

96. Cook, W.D., Harrison, J., Imanirad, R., Rouse, P., and Zhu, Joe, Data envelopment analysis with nonhomogeneous DMUs, *Operations Research*, Vol. 61, No. 3 (2013), 666-676.
95. Lim, S., and Zhu, Joe, Incorporating performance measures with target levels in data envelopment analysis, *European Journal of Operational Research*, Vol. 230, Issue 3 (2013), 634-642. [Corrigendum EJOR, Vol. 231, Issue 3 (2013), page 790]
94. Sherman, H.D., and Zhu, Joe, Analyzing performance in service organizations, *Sloan Management Review*, Vol. 54, No. 4 (Summer 2013), 36-42. [translated and published: *Analizar el desempeño en organizaciones de servicio*, Harvard Deusto business review, No. 228 (2013), 6-15.]
93. Imanirad, R., Cook, W.D., and Zhu, Joe, Partial input to output impacts in DEA: Production considerations and resource sharing among business subunits, *Naval Research Logistics*, Vol. 60, Issue 3 (2013), 190-207.
92. Lim, S., and Zhu, Joe, Integrated data envelopment analysis: Global vs local optimum, *European Journal of Operational Research*, Vol. 229, Issue 1 (2013), 276-278.
91. Chen, Y., Cook, W.D., Kao, C., and Zhu, Joe, Network DEA pitfalls: Divisional efficiency and frontier projection under general network structures, *European Journal of Operational Research*, Vol. 226 (2013), 507-515.
90. Premachandra, I.M., Zhu, Joe, Watson, J., and Galagedera, D.U.A., Best-performing US mutual fund families from 1993 to 2008: Evidence from a novel two-stage DEA model for efficiency decomposition, *Journal of Banking and Finance*, Vol. 36, Issue 12 (2012), 3302-3317.
89. Chen, C-M, Du, J. Huo, J., and Zhu, Joe, Undesirable factors in integer-valued DEA: Evaluating the operational efficiencies of city bus systems considering safety records, *Decision Support Systems*, Vol. 54 (2012), 330-335.
88. Chen, C-L, Zhu, Joe, Yu, J-Y, and Noori, H., A new methodology for evaluating sustainable product design performance with two-stage network data envelopment analysis, *European Journal of Operational Research*, Vol. 221, Issue 2 (2012), 348-259.
87. Cook, W.D., Harrison, J., Rouse, P., and Zhu, Joe, Relative efficiency measurement: The problem of a missing output in a subset of decision making units, *European Journal of Operational Research*, Vol. 220, Issue 1 (2012), 79-84.
86. Du, J., Chen, C-M, Chen, Y., Cook, W.D., and Zhu, Joe, Additive super-efficiency in integer-valued data envelopment analysis, *European Journal of Operational Research*, Vol. 218 (2012), 186-192.
85. Lee, H-S, and Zhu, Joe, Super-efficiency infeasibility and zero data in DEA, *European Journal of Operational Research*, Vol. 216 (2012), 429-433.
84. Cook, W.D., and Zhu, Joe, Multiple variable proportionality in data envelopment analysis, *Operations Research*, Vol. 59, No. 4 (2011), 1024-1032.
83. Cook, W.D., and Zhu, Joe, Output-specific input assurance-regions in DEA, *Journal of the Operational Research Society*, Vol. 62 (2011), 1881-1887.

82. Zhu, Joe, Airlines performance via two-stage network DEA approach, *Journal of CENTRUM Cathedra*, Vol. 4, Issue 2 (2011), 260-269.
81. Chen, C-M, and Zhu, Joe, Efficient resource allocation via efficiency bootstraps: An application to R&D project budgeting, *Operations Research*, Vol. 59 (2011), May-June, pp. 729-741.
80. Lee, H-S, Chu, C-W, and Zhu, Joe, Super-efficiency DEA in the presence of infeasibility, *European Journal of Operational Research*, Vol. 212 (2011), 141-147.
79. Liang, L., Li, Z-Q, Cook, W.D., and Zhu, Joe, Data envelopment analysis efficiency in two-stage networks with feedback, *IIE Transactions*, Vol. 43 (2011), 309-322.
78. Du, J., Liang, L., Chen, Y., Cook, W.D., and Zhu, Joe, A bargaining game model for measuring performance of two-stage network structures, *European Journal of Operational Research*, Vol. 210, Issue 2 (2011), 390-397.
77. Cook, W.D., Zhu, Joe, Bi, G-B, and Yang, F., Network DEA: Additive efficiency decomposition, *European Journal of Operational Research*, Vol. 207, Issue 2 (2010), 1122-1129.
76. Chen, Y., Du, J., Sherman, H.D., and Zhu, Joe, DEA model with shared resources and efficiency decomposition, *European Journal of Operational Research*, Vol. 207 (2010), 339-349.
75. Cook, W.D., Liang, L., and Zhu, Joe, Measuring performance of two-stage network structures by DEA: A review and future perspective, *OMEGA*, Vol. 38 (2010), 423-430.
74. Cook, W.D., and Zhu, Joe, Context-dependent performance standards in DEA, *Annals of Operations Research*, Vol. 173, No. 1 (2010), 163-175.
73. Du, J., Liang, L., and Zhu, Joe, A slacks-based measure of super-efficiency in data envelopment analysis: A Comment, *European Journal of Operational Research*, Vol. 204 (2010), 694-697.
72. Chen, Y., Cook, W.D., and Zhu, Joe, Deriving the DEA frontier for two-stage processes, *European Journal of Operational Research*, Vol. 202 (2010), 138-142.
71. Cook, W.D., and Zhu, Joe, Piecewise linear output measures in DEA, *European Journal of Operational Research*, Vol. 197 (2009), 312-319.
70. Cook, W.D., Yang, F., and Zhu, Joe, Nonlinear inputs and diminishing marginal value in DEA, *Journal of the Operational Research Society*, Vol. 60, No. 11 (2009), 1567-1574.
69. Chen, Y., Cook, W.D., Li, N., and Zhu, Joe, Additive efficiency decomposition in two-stage DEA, *European Journal of Operational Research*, Vol. 196 (2009), 1170-1176.
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66. Liang, L., Wu, J., Cook, W.D., and Zhu, Joe, The DEA game cross-efficiency model and its Nash equilibrium, *Operations Research*, Vol. 56, No. 5 (2008), 1278-1288.

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64. Liang, L., Wu, J., Cook, W.D., and Zhu, Joe, Alternative secondary goals in DEA cross-efficiency evaluation, *International Journal of Production Economics*, Vol. 113 (2008), 1025-1030.
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60. Gregorious, G.N., and Zhu, Joe, Data envelopment analysis – a way to assess the efficiency of funds of hedge funds, *Journal of Portfolio Management*, Vol. 33, No. 2 (2007), 120-132.
59. Cook, W.D., and Zhu, Joe, Classifying inputs and outputs in data envelopment analysis, *European Journal of Operational Research*, Vol. 180, Issue 2 (2007), 692-699.
58. Cook, W.D., and Zhu, Joe, Within-group common weights in DEA: An analysis of power plant efficiency, *European Journal of Operational Research*, Vol. 178, Issue 1 (2007), 207-216.
57. Sherman, D.H., and Zhu, Joe, Benchmarking with quality-adjusted DEA (Q-DEA) to seek lower-cost high-quality service: Evidence from a U.S. bank application, *Annals of Operations Research*, Vol. 145, No. 1 (2006), 301-319.
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