**Errata for Linear and Nonlinear Optimization, 2nd Edition, First Printing**

by Griva, Nash, and Sofer

Last modified on July 31, 2010

Items are sorted by order of occurrence within the book. Negative line numbers are counted from the bottom of the page. Within displayed equations matrices and vectors are counted as a single line.

| | | |
|---|---|---|
| Page 10 | Line -4 | |
| | Change: | $a_{ij}$ |
| | To: | $a_{ij}x_j$ |
| Page 23 | Line -2 | |
| | Change: | $\xi$ |
| | To: | $\xi_i$ |
| Page 24 | Line -3 | |
| | Change: | (13.3), (0.31.5) |
| | To: | (1, 3.3), (0.3, 1.5) |
| Page 25 | Line 3 | |
| | Change: | Repeat the problem when the first class includes also the point (0.2, 2.5) and the second class includes the point (1.7, 3.6). |
| | To: | Repeat the problem when the point (0.2, 2.5) is in the first class rather than the second, and the point (1.7, 3.6) is in the second class rather than the first. |
| Page 29 | Line 8 | |
| | Change: | 72 Gy |
| | To: | 78 Gy |
| Page 35 | Line 10 | |
| | Change: | 1444 detector pairs |
| | To: | 2164 detector pairs |
| Page 41 | Line 9 | |
| | Change: | Schökopf |
| | To: | Schölkopf |
| Page 41 | Line 16 | |
| | Change: | *Eruditorium* |
| | To: | *Eruditorum* |
| Page 52 | Line -3 | |
| | Change: | $f(x) = c^T x$ for some vector $c$ |
| | To: | $f(x) = c^T x + b$ for some vector $c$ and scalar $b$ |
| Page 53 | Line -3 | |
| | Change: | $f(\alpha(x) + (1 - \alpha)x)$ |
| | To: | $f(\alpha(x) + (1 - \alpha)y)$ |
| Page 53 | Line -2 | |
| | Change: | any local minimizer |
| | To: | any strict local minimizer |
| Page 53 | Line -1 | |
| | Change: | a global minimizer |
| | To: | a strict global minimizer |
| Page 53 | Line -1 | |
| | Insert: | New sentence at end of line:<br>Is every local minimizer also a global minimizer? |
| Page 148 | Exercise 3.2 | |
| | Change: | Example 5.5 |
| | To: | Example 5.4 |
| Page 160 | Exercise 4.6 | |
| | Change: | Examples 5.7, 5.8 and 5.9 |
| | To: | Examples 5.6, 5.7 and 5.8 |

Page 166 Line -6

Change: $x_4$

To: $x_5$

Page 186 Line 9

Change: $y_i - M$

To: $M - y_i$

Page 188 Line 9

Change: maximize

To: minimize

Page 203 Exercise 4.4

Change: basic $x_1$ $x_2$ $x_3$ $x_3$ $x_4$ $x_5$ rhs

To: basic $x_1$ $x_2$ $x_3$ $x_4$ $x_5$ $x_6$ rhs

Page 206 Line -2

Change: $z(\alpha) = -13 + \alpha c_B^T x_B = -13 + 21\alpha$

To: $z(\alpha) = -13 + \alpha \Delta c_B^T x_B = -13 + 21\alpha$

Page 207 Line 9

Change: $\hat{c}_N^T = c_N^T - c_B^T B^{-1} N = \begin{pmatrix} 0 \\ \frac{1}{7} \end{pmatrix}$

To: $\hat{c}_N^T = c_N^T - c_B^T B^{-1} N + \alpha(\Delta c_N^T - \Delta c_B^T B^{-1} N) = \begin{pmatrix} 0 \\ \frac{1}{7} \end{pmatrix}$

Page 208 Line 2

Change: $\hat{c}_N^T = c_N^T - c_B^T B^{-1} N = \begin{pmatrix} 0 \\ \frac{1}{8} \end{pmatrix}$

To: $\hat{c}_N^T = c_N^T - c_B^T B^{-1} N + \alpha(\Delta c_N^T - \Delta c_B^T B^{-1} N) = \begin{pmatrix} 0 \\ \frac{1}{8} \end{pmatrix}$

Page 220 Line -4

Change: $c_N = \begin{pmatrix} -5 \\ 0 \end{pmatrix}$

To: $c_N = \begin{pmatrix} 5 \\ 0 \end{pmatrix}$

Page 220 Line -3

Change: $N = \begin{pmatrix} 2 & 1 \\ 4 & 0 \end{pmatrix}$

To: $N = \begin{pmatrix} -2 & 1 \\ -4 & 0 \end{pmatrix}$

Page 398 Line -12

Change: $-g(x)$

To: $-\nabla f(x)$

Page 539 Line -14

Change: $y_j(w^T x_j - b) = 1$

To: $y_j(w^T x_j + b) = 1$

Page 539 Line -12

Change: $b = w^T x_j - y_j = \sum_{i \in SV} \alpha_i y_i x_i^T x_j - y_j$

To: $b = y_j - w^T x_j = y_j - \sum_{i \in SV} \alpha_i y_i x_i^T x_j$

Page 547 Lines -11, -12

Change: . . . Guignard (1969) is the weakest in the sense that it is not only sufficient but also necessary for the fulfillment of the optimality conditions.

To: . . . Guignard (1969) is not only sufficient but also necessary in some sense for the fulfillment of the optimality conditions (cf. Gould and Tolle (1971)).

Page 655 Line -13

Change: Lorenz

To: Lorentz

| | | |
|---|---|---|
| Page 709 | Line 3 | |
| | Change: | pp. 1 - 52 |
| | To: | pp. 1 - 51 |
| Page 710 | Line 2 | |
| | Change: | Compte Rendu |
| | To: | Comptes Rendus |
| Page 739 | Line 9 Column 2 | |
| | Change: | Lorenz |
| | To: | Lorentz |