Errata:

Adaptive Filtering

Algorithms and Practical Implementation

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The publisher regrets the errors in the copyright page, chapters 2, 3, 4, 5, 6, 11, 12, 13, 15 and 17 in the print and online versions of this book. The corrected versions are given on the following pages:

Page iv, line 4, "diniz@lps.ufrj.br" replace by "diniz@smt.ufrj.br".

Page 62, line 3 before equation (2.158) "space" should be replaced by "time separation".

Page 66, item (b) "In the prediction case the input signal is ...." should be replaced by "In the prediction case if the input signal at the predictor is ....".

Page 72, line 2 after equation of item (f), after "respectively" include the sentence ", except for item (c) where $n_2(k)$ is uniformly distributed between $-\pi$ and π".

In the Initialization of the Algorithms of Pages 81, 100, 140, 154, 161, 165, 184, 255, 259, 262, 267, 269, 275, 301, 473, 517, 520, 533, and 592 remove "$\mathbf{x}(0) =$".

Page 122 third line from bottom to top where is "$x^2(0)$" replace by "$x^2(i)$".

Page 123 horizontal axis of Figure 3.17 where is "$x^2(k)$" replace by "$x^2(i)$".

Page 123 caption of Figure 3.17 where is "$x^2(0)$" replace by "$x^2(i)$".

Page 144, second line above equation (4.29), after "In this case," include the sentence "considering the additional noise close to zero".

Page 144, equation (4.31) "$E[e^2(k+1)] =$" should be "$E[\varepsilon^2(k+1)] =$".

Page 145, line 1 "$E[e^2(k+1)] \approx$" should be "$E[\varepsilon^2(k+1)] \approx$".

Page 166, line 13 should read as:
$L+1$ eigenvalues equal to $1-\mu$ and $N-L$ eigenvalues equal 1.

Page 171, line following equation (4.99), "By substituting (4.98) in (4.99)" should be "By substituting (4.99) in (4.98)".

Page 178, equation (4.135) line 2 and 3, "$\mathbf{n_W}(k)$" should be "$\mathbf{n_W}(k+1)$".

In the Initialization of the Algorithms of Pages 212, 213, 235, 236, 475, complete the sentence "…. of the input signal power estimate" with "input signal power estimate times $1-\lambda$, for $\lambda < 1$".

Page 220, last equation and page 221 first equation and first line Λ should be $\mathbf{\Lambda}$.

Page 234 equations (5.94) and (5.95) should read as:

$$\xi^d(k) = \sum_{i=0}^{k} \lambda^{k-i} |\varepsilon(i)|^2 = \sum_{i=0}^{k} \lambda^{k-i} |d(i) - \mathbf{w}^H(k)\mathbf{x}(i)|^2$$

$$= \sum_{i=0}^{k} \lambda^{k-i} \left[d(i) - \mathbf{w}^H(k)\mathbf{x}(i) \right] \left[d^*(i) - \mathbf{w}^T(k)\mathbf{x}^*(i) \right] \qquad (5.94)$$

and

$$\frac{\partial \xi^d(k)}{\partial \mathbf{w}^*(k)} = -\sum_{i=0}^{k} \lambda^{k-i} \mathbf{x}(i)[d^*(i) - \mathbf{w}^T(k)\mathbf{x}^*(i)] \qquad (5.95)$$

respectively

Page 272, second line after equation (6.66), remove "the" after "such that".

Page 279, second and third lines above subsection 6.9.2, replace the word "matrix" by "vector".

Page 283, line 9 of subsection 6.9.3, replace the word "also" by "not".

Page 286, line 3 before em Example 6.3 remove the word "signal".

Page 291, line 1 after the equation, where is "$f_\mathrm{D} = \frac{v}{\lambda_s} = \frac{v f_o}{c}$" should be "$f_\mathrm{D} = \frac{|v|}{\lambda_s} = \frac{|v| f_o}{c}$".

Page 293, line 4, where is "$\bar{m} = 0, 1, \ldots, \bar{N}$" should be "$\bar{m} = 0, \pm 1, \ldots, \pm\frac{\bar{N}}{2}$".
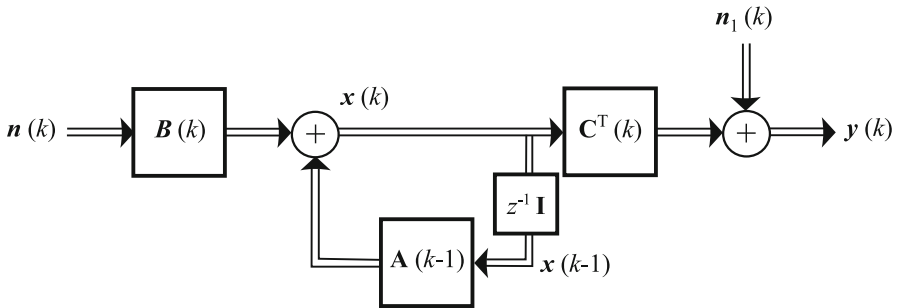
Page 566, line 1, "in the update (13.24)" should be "in the update (13.23)".

Page 571, in equation (13.32) "$\mathbf{x}(k)$" should be "$\bar{\mathbf{x}}(k)$".

Page 623, four lines above equation (17.1) it should read "current" instead of "previous".

Page 623 in equation (17.1), line 2, "$\mathbf{x}(k-1)$" should be "$\mathbf{x}(k)$".

Page 624 in Figure 17.1, replace the figure by

Page 625 in equation (17.5), "$\mathbf{x}(k-1)$" should be "$\mathbf{x}(k)$".

Page 625 in equation (17.6), last line, second vector should be
$$
\begin{bmatrix}
x(k) \\
x(k-1) \\
\vdots \\
x(k-N)
\end{bmatrix}.
$$