

Errata for "An Introduction to Wavelet Analysis," by Walnut
As of 2-12-03

1. p. xv, l. 7 (bottom): "orthnormal" should be "orthonormal"
 2. p. xvi, l. 15 (bottom): "Clovis." should be "Clovis"
 3. p. 9: All references to "Figure 1.3(x)" should simply read "Figure 1.3"
- This occurs on l. 12, l. 21, and l. 1(bottom). In particular, "Figures 1.3(c) and (d)" on l. 1 (bottom) should read "Figure 1.3"
4. p. 13, l. 1 (bottom), p. 14, l. 5, l. 10: "Figure 1.4(x)" should be "Figure 1.4"
 5. p. 19, l. 2 (bottom): "mean" should be "mean-square"
 6. p. 27, l. 10 (bottom): " $n+1$ " should be " $n-1$ "
 7. p. 32, l. 6: " π " should be " $\pi/2$ "
 8. p. 32, l. 13: " $(-1)^n i \pi/2n$ " should be " $(-1)^n i/2n$ "
 9. p. 36, equation (2.10): " n " should be " k ", and " N " should be " n "
 10. p. 39, equation (2.13): " $k+1$ " should be " $2k+1$ "
 11. p. 39, l. 3 (bottom): " $\sigma(n)$ " should be " σ_n "
 12. p. 61, l. 2: " $a, b \rightarrow 0$ " should be " $a, b \rightarrow \infty$ "
 13. p. 67, l. 9: "Theorem 3.21" should be "Theorem 3.20"
 14. p. 70, l. 8 (bottom): " L^1 " should be " L^2 " and " L^2 " should be " L^1 " on this line.
- l. 10 (bottom): The norm on f should have subscript 2 and that on g should have subscript 1.
- p. 71, l. 9: " L^1 " should be " L^2 " and " L^2 " should be " L^1 " on this line.
15. p. 80, l. 7: add the words "the following hold." to this line.
 16. p. 85, l. 10, l. 15: In the denominator, " Ω " should be " $\sqrt{\Omega}$ "
 17. p. 90, l. 1 (bottom): " $n \in \mathbb{Z}$ " should be " $k \in \mathbb{Z}$ "
 18. p. 91, l. 13: "Exercise 4.25" should be "Exercise 4.26" (label is exer3.4)
 19. p. 91, l. 3 (bottom): "Definition 4.10(c)" should be "Definition 4.7(c)"
 20. p. 91, l. 5 and 8 (bottom): " T " should be " T_h "
 21. p. 92, l. 6: "Definition 4.10(c)" should be "Definition 4.7(c)"
 22. p. 92, l. 16: "Theorem 4.12(c)" should be "Theorem 4.12"
 23. p. 94, l. 10 (bottom): right paren missing
 24. p. 95, l. 14: In first summation, " n " should be " k "
 25. p. 95, l. 10: " $n \geq n_0$ " should be " $n \leq n_0$ "
 26. p. 96, l. 16: " $a(0) \neq 0$ " should be " $a(0) = 1$ "
 - l. 19: " $a(0)^{-1}$ " should be removed
 27. p. 107, l. 9: " $\hat{x}(n)$ " should be " $\hat{x}(k)$ "
 28. p. 108, l. 10: replace "+" with "-" and remove subsequent two lines
 29. p. 109, l. 19: "+N" should be added to this line
 30. p. 115, l. 2, 6, 7, 9, 16: " $[0,1)$ " should be " $[0,1]$ "
 31. p. 117: In Figure 5.1(left), lower range of y-axis should be -1, not 1
 32. p. 117, l. 5 (bottom): "figure" should be "Figure"
 33. p. 120, l. 14, l. 2 (bottom): "Figure 5.2(x)" should be "Figure 5.2"
 34. p. 122, l. 17: "figure" should be "Figure"
 35. p. 125, l. 9: " $[0,1)$ " should be " $[0,1]$ "

36. p. 127, l. 3: extra space in word "functions"
37. p. 128, l. 3, 6, 12: "[0,1)" should be "[0,1]"
38. p. 130, l. 3 (bottom), l. 1 (bottom), p. 132, l. 3 (bottom), l. 1 (bottom):
 $r_{\{j,k\}}(x)$ should be $r_{\{j,k\}}$
39. p. 133, l. 8: $2^{-3j/2}$ should be $2^{-j/2}$
40. p. 141, l. 18: "f" should be P_{Nf}
41. p. 142, l. 5 (bottom): no parens around "DHT"
42. p. 147, l. 14: "mulitplying" should be "multiplying"
43. p. 152, l. 2 (bottom): last "m" should be $2m$
44. p. 172, l. 1 (bottom), 2 (bottom): "n" should be "k"
45. p. 173, l. 1: $|\{n\}| > K$ should be $|\{k\}| \leq K$
46. p. 179, l. 5: "Definition 7.12(b)" should be "Definition 7.12(d)"
47. p. 184, l. 2 (bottom): $c(k)$ should be c_k
48. p. 185, l. 6 (bottom): in subscript, $j, k \in \mathbb{Z}$ should be $j \in J, k \in \mathbb{Z}$
49. p. 186, l. 11: "as in the proof of Theorem 7.35" should be "by (7.23)"
50. p. 187, l. 2: second $\varphi(x)$ should be $\varphi(2x)$
51. p. 187, l. 5: $\varphi(\gamma/2)$ should be $\widehat{\varphi}(\gamma/2)$
52. p. 188, l. 6: "figure" should be "Figure"
53. p. 189: caption of Figure 7.4 contains extra right paren.
54. p. 191, l. 14 (bottom): in subscript, $k_{\{,1\}}$ should be k_1
55. p. 192, l. 7 (bottom): "spacial" should be "spatial"
56. p. 212, l. 8 (bottom), 9 (bottom): 2^j should be $2^{j+1}R$
57. p. 219, l. 10: $h_{\{m-2n\}}$ should be $h(m-2n)$
58. p. 222, l. 2: subscript k should be replaced by (k) in both formulas.
59. p. 225, l. 2 (bottom): expression to right of equals sign should be multiplied by $1/2$
60. p. 230, l. 6 (bottom): "Remark 8.6(5)" should be "Remark 8.6(c)"
61. p. 236, l. 4: $\$h\$$ and $\$g(x)\$$ should be $\$h(n)\$$ and $\$g(n)\$$
62. p. 239, l. 8 (bottom): first "C" should be $\pi, \sqrt{2}, C$
63. p. 247, l. 17: in subscript m_0 should be M_0
64. p. 252, l. 7, p. 253, l. 11: should be overline on $\widehat{\psi}(2^{-j}\gamma)$
65. p. 253, l. 12, 18, 19, 20, 21, 23: should be overline on $\widehat{\psi}^{(k)}(0)$
66. p. 253, l. 13: should be overline on $R_k(2^{-j}\gamma)$
67. p. 254, l. 1 (bottom), p. 255, l. 10, 11, 12: "a" should be a^N
68. p. 254, l. 13, 14, 15: $a^{3/2}$ should be $a^{N+1/2}$
69. p. 254, l. 11: the integral on that line should be raised to the $1/2$
70. p. 261, l. 16: $-2\pi i \gamma$ should be $-\pi i \gamma$
71. p. 261, l. 8 (bottom): should be overline on $m'_0(1/2)$
72. p. 265, l. 19: first "N" in exponent should be $2N-1$
73. p. 270, l. 1(bottom): $75z^4$ should be $150z^4$ and $75z^6$ should be $150z^6$
74. p. 272, l. 14 (bottom): missing right paren and $(\gamma+1/2)$ should be γ
75. p. 276, l. 1 (bottom): "N" in binomial coefficient should be $N+n-1$
76. p. 277, l. 2: $1/2$ should be removed and "N" in binomial coefficient should be $N+n-1$
77. p. 292, l. 4,5 (bottom): "i" and "ii" should have parentheses
78. p. 292, l. 1 (bottom): "Remark 10.5(5)" should be "Remark 10.5(e)"

79. p. 306, l. 2: first "\varphi" should be "\psi"
80. p. 306, l. 8: "\varphi" should be "\psi"
81. p. 313, l. 11, 13: should be overline on " $m_0(\gamma+1/2)$ "
82. p. 317, l. 2: remove "\widetilde{g}(k)=(-1)^k\,\overline{h(1-k)}"
83. p. 318, l. 15: "h(k)" should be "h(n)"
84. p. 319, l. 2: "(g)" should be "(e)"
85. p. 320, l. 3 (bottom): subscript "2" should be "6"
86. p. 325, l. 12, 13: " $(z^{-1}+1)$ " should be " $(z+1)$ "
87. p. 326, l. 7: "1/64" should be "-5/64"
88. p. 326, l. 10: "1/64" should be "-5/64"
89. p. 326, l. 13: "-.03226944131447 n=-4,3" should be added above the top line to the right of the curly bracket
90. p. 326, l. 4 (bottom): "1/64" should be "-5/64"
91. p. 326, l. 1 (bottom): "1/64" should be "-5/64"
92. p. 327, l. 8 (bottom): "1/64" should be "-5/64"
93. p. 327, l. 5 (bottom): "1/64" should be "-5/64"
94. p. 338, equation (11.1): last "\gamma" should be "\gamma/2"
95. p. 339, equation (11.2): last "\gamma" should be "\gamma/2"
96. p. 351, l. 6 (bottom): "Theorem 11.19" should be "Definition 11.15"
97. p. 353, l. 9, 11: "I" should be "A"
98. p. 353, l. 3 (bottom): insert before "\$W_{\{j-1,2n+1\}}\$" "\$W_{\{j-1,2n\}}\$" and"
99. p. 363, l. 15, 16: in the denominators "c" should be bold font
100. p. 371, l. 12 (bottom): remove the line
101. p. 383, l. 9 (bottom): "Definition 11.5" should be "Definition 12.6"
102. p. 388, l. 7: on the left "N" should be "q" and on the right "N-2" should be "q/2"
103. p. 392: in caption to Figure 12.4, "Iage" should be "Image"
104. p. 397, l. 3: "aplication" should be "application"
105. p. 401, l. 11 (bottom): "(13.9)" should be "(13.12)"
106. p. 401, l. 9 (bottom): "(13.10)" should be "(13.13)"
107. p. 410, l. 4: initial "=" should be removed
108. p. 413, l. 2: "-2\pi" should precede "Qf(x)"
109. p. 413, l. 8 (bottom): missing right paren.
110. p. 419, l. 8, 11: "j-1" should be "j=1"
111. p. 419, l. 3 (bottom): "R" should be "r"
112. p. 419, l. 1 (bottom): "in with" should be "with"
113. p. 437, l. 17, 19, 28: "[0,1)" should be "[0,1]"