

Duman/Ghrayeb “Coding for MIMO Communication Systems”

ERRATA (updated on 9/4/08)

- Chapter 2, p. 24: Replace “ x ” with “ x_j ” in Equation 2.26.
- Chapter 2, p. 24: “arg min” should read “arg max” in Equations 2.27 and 2.28.
- Chapter 2, p. 24 and 27: $\sqrt{\rho}$ is missing in Equations 2.29 and 2.37.
- Chapter 3, p. 61: “ \leq ” should read “ $<$ ” in Eqn. 3.45.
- Chapter 3, p. 61: “ $k 2^R - 1$ ” in the numerator should read “ $k(2^R - 1)$ ” in Eqn 3.48.
- Chapter 4, p. 75: $y_j(1), y_j(2), y_j(k)$ in Eqns (4.16)-(4.18) should be $y'_j(1), y'_j(2), y'_j(k)$.
- Chapter 4, p. 80: The symbol “ T ” should be “ N ” in the line just before 4.36.
- Chapter 5, p. 96: “arg min” should read “arg max” in Equations 5.2 and 5.3.
- Chapter 5, p. 98: In the second line after Equation 5.14, $\mathbf{U}^H \mathbf{A} \mathbf{U}$ should read $\mathbf{U}^H \mathbf{\Lambda} \mathbf{U}$.
- Chapter 5, p. 105: The caption of Figure 5.6 should read “... and one/two receive antennas.”
- Chapter 5, p. 108: 4th and 5th lines of Section 5.4.2 should read “... for four- ($s = 2$), eight- ($s = 3$) and 16-state ($s = 4$) ...”
- Chapter 5, p. 111: Exponents in (5.41) – (5.43) should read “ $-N_r$ ” instead of “ N_r ”.
- Chapter 6, p. 126: “trace $\{\mathbf{X}^H \mathbf{X}\} = 1$ ” and NOT “ N_t ” in the 5th line after (6.2).
- Chapter 8, p. 225: In the example, \mathbf{S}_4 should read

$$\mathbf{S}_4 = \begin{bmatrix} 0 & j \\ j & 0 \end{bmatrix}.$$

- Chapter 8, p. 226: Equation (8.43) should read

$$\hat{\mathbf{S}}_k = \arg \max_{\mathbf{S}_k \in \mathcal{S}} \text{Re} \left\{ \text{trace} \left\{ \mathbf{S}_k \mathbf{Y}_{k-1} \mathbf{Y}_k^H \right\} \right\}.$$

- Chapter 8, p. 228: “noncoherent detection” in the captions of Figures 8.11 and 8.12 should read “differential detection.”
- Chapter 9, p. 242: In line 7, $\mathbf{X}(N)$ should read $\mathbf{N}(N)$.