Chapter One

- page 16 at the end of line 28: "date rate" should be changed to "data rate"

- Page 23. In Table 1.1, the 3G Broadband wireless entry, 1.7-1.85 MHz and 2.5-2.69 MHz should be 1.7-1.85 GHz and 2.5-2.69 GHz, respectively.

Chapter Two

- Page 30, equation (2.3): $f_D = \frac{v}{\lambda} \cos(theta)$, i.e. λ divides the velocity v, not θ.

- Page 32, second line of Example 2.1, the cell radius of 100 m should be changed to 10 m (this is used later in the solution where we set $d = 10$ m.) Also in this example, the last line has $P_t = 43.9$ kW, which should be changed to $P_t = 43.9$ W

- Page 36, In Figure 2.5 the legend shows the same dot-dash line being used for transmit antenna height and critical distance. Only the critical distance is the dot-dash line (at about 3.1 on the x-axis). The transmit antenna height is the vertical dashed line at about 1.7 on the x-axis.

- Page 36, about a third of the way down, "slowing increasing" should read "slowly increasing".

- Page 36. 6 lines from the end "out of phase by at least π" should read "out of phase by approximately π"

- Page 40, in equation 2.24, $\lambda/(4\pi(d + d'))$ should be inserted before $L(v)$.

- Page 44. 3rd line. cooperative should be changed to cooperation.

- page 44, equation (2.37), $(\gamma_1 - \gamma_2)$ should be changed to $(\gamma_2 - \gamma_1)$.

- Page 47, In first line of Soln to Example 2.3, MMSE error equation should be changed to MMSE equation.

- Page 47, Example 2.3, 2 lines after $F(\gamma)$ expression, $10\gamma \log_{10}(d)$ should be changed to $10\gamma \log_{10}(d_i)$

- Page 50, Equation 2.48, we need not assume that α is the same for all blocking objects to get the Gaussian distribution, since if the ith object has attentuation constant α_i, $\sum \alpha_i d_i$ will also converge to a Gaussian distribution by the CLT.

- Page 51, Equation 2.49, it is assumed that the mean $\mu_{\psi_{dB}}$ is the same at the two points whose autocorrelation is being measured.

- The first paragraph of Section 2.8 (pg. 51) states that Figure 2.1 illustrates the variations of the combined path loss and shadowing model. However, this model is only accurate for $d > d_0$, so Fig. 2.1 must start at $d = d_0$ instead of $d = 0$ for it to be applicable to this model.

- Page 54, In eqn. 2.57, $>=$ should be $>$, based on the definition of P_A.

- Page 54, 3rd line from bottom, $\overline{P}_R$ should be changed to $\overline{P}_r(R)$

- Page 58, problem 2.16, plot should go from 1 to 1000 m to get the three segments. Also assume a carrier frequency $f_c = 900$ MHz and $G_r = G_l$.

- Page 59, problem 2.21, to be consistent with chapter notation, change μ dBm to $\mu_{\psi_{dB}}$ dBm and σ_ψ dBm to $\sigma_{\psi_{dB}}$ dBm

- Page 60, problem 2.25, as stated is the same as Example 2.7. The problem should be changed such that lines 2-3 read "the received power due to path loss at the cell boundary equals twice the desired level for nonoutage".

Chapter Three

- Page 65, Equation 3.2, ϕ_{D_n} should be changed to $\phi_{D_n}(t)$ 12 lines later, the definition of ϕ_{D_n} should be changed to $\phi_{D_n}(t) = \int_t 2\pi f_{D_n}(\tau)d\tau$.

- Page 66, Equation 3.3, ϕ_{D_n} should be changed to $\phi_{D_n}(t)$.

- Fourth line of pg. 72, should say "Consider now the autocorrelation and cross correlation..."

- Page 70, line 4, excees should be changed to excess.

- Page 70, equation 3.11, to be consistent with later expressions, the generic sum $\sum_n$ should be changed to $\sum_{n=0}^{N(t)}$.

- Page 70, line before (3.11), change "$u(t - \tau_i) \approx u(t)$ for all i and we can rewrite (3.4) as" to "$u(t - \tau_i) \approx u(t - \tau)$ for all i, where τ is the delay of the LOS component. Normalizing $\tau = 0$, we can rewrite (3.4) as"

- Page 71, In equations (3.14) and (3.15), the sum should start at $n = 0$ instead of $n = 1$.

- Page 72, In Equation (3.21) there should be an expectation in front of the final cosine expression.

- Page 72-74, In Equations (3.21)-(3.22) and (3.24)-(3.27) the wavelength λ should divide the velocity-time product $v\tau$, not the cosine argument.

- Page 79, In the 2 lines that preceed (3.37), P_r should be changed to $\overline{P}_r$ (P_r occurs 3 times in these 2 lines).

- Page 91, Figure 3.14, the vertical dashed lines should be shifted out to where the functions first hit zero, and then T_c should be changed to $2T_c$, and B_D should be changed to $2B_D$.

- Page 92, 2 lines before Section 3.4, $S(0, \rho)$ should be changed to $S_c(0, \rho)$.

- Page 97, Problem 3.17. part b. end of first line should read "separated in frequency by Δf instead of "separated in time by Δt."

Chapter Four

- On page 120, first line of 3rd paragraph, for definition of $gamma_j[i]$, B should be B_c. The definition should read $gamma_j[i] = (|H_j[i]|^2 \bar{P})/(N_0 B_c)$.

- On p.175, equation 6.15, there should be a d_θ after the dz to indicate the dummy variable of the first integral.

- p.106 In the 8th line from the end, (1-.6)*251550 = 125.78 kbps is shown, but the real value is 100.62 kbps

- p.118 In the 2nd line from the end, $\gamma(f) = |H(f)|^2 * P/N_0$ is shown, but that should be $\gamma(f) = |H(f)|^2 * P/(N_0 * B)$.

Chapter Five

- Page 131, first line, $(s_{i1}, ..., s_{iN})$ should be changed to $[s_{i1}, ..., s_{iN}]^T$

- Page 131, last line, equation (5.17), $\mathbf{s}_i\mathbf{s}_k^T$ should be changed to $\mathbf{s}_i^T\mathbf{s}_k$

- Page 139, 2nd line should read $\mathbf{s}_k - \mathbf{s}_i$ instead of $\mathbf{s}_i - \mathbf{s}_k$. This change should also be made in Figrue 5.9 at the top of this page.

Chapter Six

- Page 179, in Equation 6.27, $A\sqrt{2}T_b$ should be changed to $A\sqrt{2/T_b}$.

- Page 185, in Equation 6.61, the dummy integration variable $d\gamma_s$ should be changed to $d\gamma$.

Chapter Seven

- Page 216, in equation (7.27), the plus sign before the second term (i.e. preceeding $\sqrt{\pi}$) should be a minus sign.

- Page 223, Equation 2.48, product should be $\prod_{i=1}^M$ instead of $\prod_{l=1}^M$.

- Page 223, line after equation 2.48, $c_1 = 1/\pi$ should be changed to $c_1 = \alpha/\pi$

Chapter Nine

- p.292, the line before (9.18) should say $R/B = log_2(M)$, not $R/B = M$, and the line after (9.18) should say $M = 2^{(R/B)} < 4$, not $M = R/B < 4$.

- Page 294, Table 9.1, the header for the last column, $S_j(\gamma)/\overline{S}$, should be changed to $P_j(\gamma)/\overline{P}$

Chapter Ten

- Page 326, Equation 10.12, log should be base 2.

- Page 344, Figure 10.14, the directive antenna figure should not have a bold circle in it, the outer circle in this figure should have a narrow line as in the sectorized antenna pattern.

- page 388. In equation 12.24 at the bottom, in the 2nd to last line of the H matrix, $h_{\mu-2}$ should be h_μ.

Chapter 14

- pg. 503 The paper by Vishwanath, Tse, and LaRoia mispells the first author's name: the correct spelling is Viswanath.

Appendix B

- p.582 In the 5th line from the beginning, det[sigma] should be — det[sigma] —. i.e. th at value should be an absolute determinant.

Bibliography

- pg. 629: The paper by Vishwanath, Tse, and LaRoia mispells the first author's name: the correct spelling is Viswanath.