Errata for Stark and Woods, 4th ed., 1st printing

1. p. 70, Problem 1.36: In lines 2-3, D should be C. Also, α should be k, and α_0 should be k_0.

2. p. 72, Problem 1.48: Add missing lines after 'independent trials.' Two new lines:

   (a) What is the probability that the ten dialed numbers create the sequence 02030202030102030202?

   (b) How many distinguishable sequences exist that involve six calls to the police, three for an ambulance, and one for the fire department?

3. p. 97, second line from the bottom : change '(n an integer)' to '(n an integer, $n \geq 1$)'

4. p. 98, three lines from the bottom: after $K_\gamma = c_b/\Gamma(b)$, add 'Generalizations of the gamma pdf exist†' with associated new footnote:
   'see NIST/SEMATECH *e-Handbook of Statistical Methods,* http://www.itl.nist.gov/div898/handbook/'

5. p. 99, seven lines from bottom in heading that begins *8. Beta:* change $(\alpha > 0, \beta > 0)$ to $(\alpha \geq 0, \beta \geq 0)$.

6. p. 103, six lines from the top: Number this equation for $P_K(k)$ as 2.5-14, and the following one for $F_K(k)$ as 2.5-15.

7. p. 104-106: Renumber five equations 2.5-14 $\rightarrow$ 2.5-16, 2.5-15 $\rightarrow$ 2.5-17 , $\cdots$, 2.5-18 $\rightarrow$ 2.5.20 .

8. p.111, six lines from the bottom: Change 'The quantity on the left is sometimes called' to 'Equation 2.2-6 is sometimes called'.

9. p. 113, six lines from the bottom: Add footnote to '*inverse Poisson transform*†' The footnote is:

   'Note that $F(\omega)$ is not a CDF.'

10. p. 117, Equation 2.6-31: Integral written in non-standard form.

11. p. 144, Figure P2.14: Replace 'Mixed pv' in the caption with 'Mixed RV'.

12. p. 284, Problem 4.3: Change $E[Y]$ to $E[X]$.

13. p. 287, Problem 4.31: Change $p(x)$ to $f\,(x)$.

14. p. 290, Problem 4.53: Change $4\exp(-4[x+y])$ to $16\exp(-4[x+y])$.

15. p. 303, line 14 from the bottom to line eight from the bottom: there are six offset equations of the form with a script capital $\mathcal{R}$ on the left and an expression in parentheses on the right. Replace the open parentheses by { and the close parentheses by } in each of these equations.

16. p. 304: In the first set of equations, there are five blocks that end in $= y_1$. Each function list, right before the equal sign, is missing a right parenthesis).

17. p. 311: In the second line of Example 5.3-5, 'manufacturer' appears as 'manufacture'.

18. p. 313: In the second line, for the expectation of matrices $\mathbf{X}$ and $\mathbf{Y}$, the expectation operator E should not be bold.

19. p. 334, Problem 5.5: change $F_{R_1}(y)$ to $F_{Y_1}(y)$. Also, in problem 5.7 change $f_{V_{1n}}W(v,w)$ to $f_{V_{1n}W}(v,w)$. In problem 5.8 change $f_{v_{1n}}(v)$ to $f_{V_{1n}}(v)$.

20. p. 334, Problem 5.10: eliminate the second (duplicate) expression $n = 2, \beta = 0$.

21. p. 334, problem 5.12 : change 'the beta CDF for $n = 15, 20, 30$' to 'the beta CDF for $\beta = 1$ and $n = 15, 20, 30$'.

22. p. 334, Problem 5.18, second line: Change $\left\{ {n \atop i} \right\}$ to $\binom{n}{i}$.

23. p. 335: The number for Problem 5.25 should be moved up three lines to '(K. Fukunaga ...'.

24. p .436, Problem 7.19. Change $\hat{\mu}$ to $\hat{\mu}_Z$

25. p. 438, Problem 7.29, third and fifth lines: Change 0.55 to 0.75.

26. p. 436: Reduce all problem numbers after problem 7.29 by 1. Thus 7.31 becomes 7.30, 7.32 becomes 7.31, etc.

27. p. 464: In the third line after the end of Definition 8.1-4, Problem 8.10 should instead be Problem 8.12.

28. p. 482: In the second line of Example 8.3-2, Figure 10.3-1 should instead be Figure 8.3-1.

29. p. 486, Section 8.4, item 1: change Equation ref. to 4.3-17.

30. p. 499: In the second line of the equation for $R_{YY}[n+m, n]$, there's an extra left bracket [before the final h function.

31. p. 501: In the first equation of Example 8.5-1, the equals sign should be a tilde ˜ and is read: 'is distributed as.' Earlier in this book, we have used a colon in place of the tilde, but both notations are widely used in practice.

32. p. 503: Toward the bottom of the page, in the third line of the last paragraph, the feedback coefficients are a_k not c_k. Also, in the next equation, the feedforward coefficients should be written b_k not d_k.

33. p. 505: About three-quarters of the page down, in the equation after the line 'In a statistical steady state, if...,' change $\mathbf{n}$ to n.

34. p. 506, Example 8.5-5: Replace start of last line with 'which, for the $\mathbf{P}$ matrix in this example, yields ...'.

35. p. 521: At end of top paragraph, 'Problem 8.54' should be 'Problem 8.52'.

36. p. 528, Problem 8.7: In second line, replace 'the values of' with 'the values of random variables'.

37. p. 535, Problem 8.32: In last line, replace second $\lambda_1 > 0$ with $\lambda_2 > 0$.

38. p. 551: In the Figure 9.2-3, I think $n(t)$ is supposed to be $N(t)$.

39. p. 564: In Definition 9.2-4, part (a), 'PMF' should be 'pdf'.

40. p. 588, in MATLAB m-file: change '`clear alpha=3;`' to '`clear; alpha=3;`'

41. p. 618, Problem 9.13, part (c): This part should only ask for the CF of the arrival time sequence $T[n]$.

42. p. 627, Figure P9.46: Error evaluation system output is $\mathcal{E}(t)$ not $\xi(t)$.

43. p. 628, Problem 9.49: In first line of part (a), change 'for WSS' to 'for jointly WSS'.

44. p. 631, Problem 9.56: Change all instances of $[n]$ to (t).

45. p. 647, 7 lines after figure: Replace 'onto Y' with 'coefficient onto X'. Then 7 lines later: Replace text starting with 'because then by the above proof ...' with 'because then $\langle X, Y \rangle = 0$ and evaluating, we find $\|X+Y\|^2 = \|X\|^2 + \|Y\|^2$.'

46. p. 687, Problem 10.6: The claim is not true as it stands. Replace 'second-order process' with 'second-order process with integrable correlation function'.

47. p. 787, Problem 11.12: Instead of the definition in Equation 11.6-1, use

$$\widehat{R}_N[m] \triangleq \frac{1}{N}\sum_{n=0}^{N-1} X[n+m]X^*[n].$$

48. p. A-2, line 4: change 'exist a value' to 'exist a finite value.'

Thanks to Mike Levy and Jonathan Holmes.

– John Woods and Henry Stark, March 2013.