Errata in Lee & Varaiya, first printing

- p. xv. In the preface. Second paragraph, second sentence "The connections detennine..." should read "The connections determine."
- p. xx. In the preface. Third paragraph: "application offrequency-domain methods to collllnunications systems" should read "application of frequency-domain methods to communications systems".
- p. 31. 4th paragraph: "One of the 64 kilobytes per second ..." should read "One of the 64 kilobits per second ..."
- p. 41. Problem 4. "3ignals" should be "signals".
- p. 61. Equation (2.12): "For all y" should read "For all t"
- p. 62. The equation for a(t) should read "d^2/dt^2 x(t)" instead of "d^2/dt x(t)"
- p. 79. Last line. The following paragraph (which begins on p. 80) should be merged with the paragraph at the bottom of page 79. As it is, it is too easy to miss the hint for the problem.
- p. 80. Problem 13(c): Missing the last line: "Give the domain, range, and assignment rule for u."
- p. 90, the second-to-last line: "consists of a sequence reactions" should be "consists of a sequence of reactions".
- p. 91, The transition from "play greeting" to "recording" should read "{end greeting}/record".
- p. 93. Line 11 should read "*else* = {*ring*, *end greeting*}".
- p. 109 at the top reads: "If simulation relations occur in both directions, then the machines are bisimilar." This isn't consistent with the usual definition of "bisimilar" in the literature... It should read: "If the matching game can be played such that either machine can move first in each turn, then the machines are bisimilar."
- p. 99, last paragraph: "(1, ... , 1, x(N), ...)" should be "(1, ... , x(N+1), ...)"
- p. 115, The second sentence in the second paragraph under summary, "Nondetermistic machines...", should be

"Nondeterministic machines..."

- p. 116, line 8, "answering a third call" should read "answering a first call".
- p. 131, first equation in example 4.2: "(1,1))" should be "(1,1)" (there is an extra close parenthesis).
- p. 131, figure 4.4: The states in the right machine should be labeled "(0,0)", "(1,0)", "(0,1)" and "(1,1)" rather than "{0,0}", "{1,0}", "{0,1}" and "{1,1}".
- p. 132, table: the inputs below the line "(next state, output) for input" should read "0 1 *absent*", not "(0,0) (1,0) ($absent_A$, 0)".
- p. 139, line 4: Remove " (each simulates the other)".
- p. 145, second paragraph: "Thus, the problem here is that there are more than one nonstuttering solution" should read "Thus, the problem here is that there is more than one nonstuttering solution."
- p. 146, the statement before example 4.6 should read: "When a machine with state-determined output is combined with any other state machines in a feedback composition, the resulting composition is also usually well-formed, as illustrated in the next example." I.e., add the word "usually." Such a composition is not always well-formed. Consider for example a machine that always outputs absent. It has state-determined output, but in a feedback loop there is no non-stuttering reaction.
- p. 149, figure 4.17(a). The output symbol "maybe" should be replaced by "absent", because "maybe" is not in the output alphabet.
- p. 150, line 6, the statement should be "Outputs_{A2} \subset Inputs_{A2}" instead of "Outputs_{A2} \subset Inputs_{A1}".
- p. 151, 5/8 of the way down,

  $output(s(n), x(n)) = output_A(s(n), (x(n), y_2(n)))$

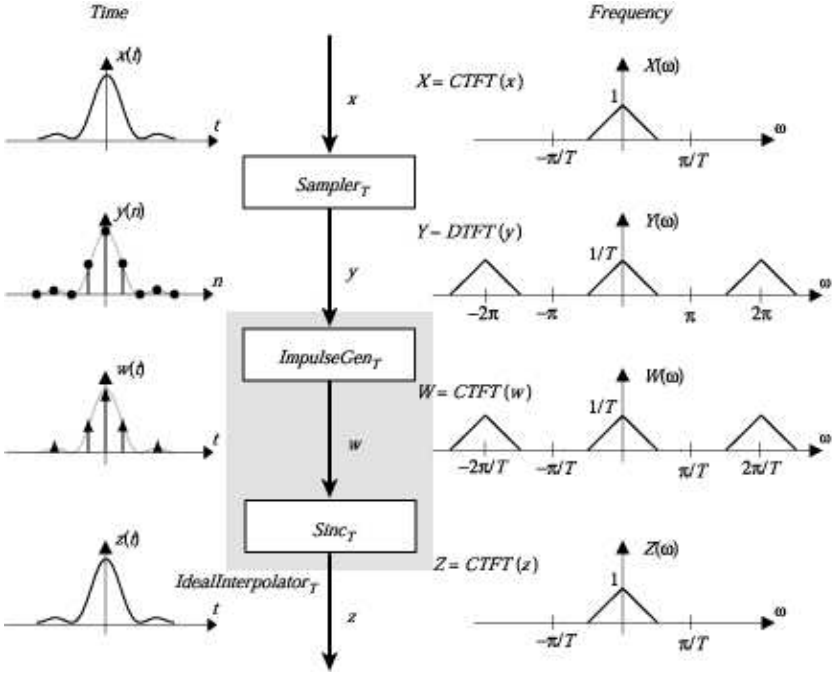
  should read:

output(s(n), x(n)) = output_{A1}(s(n), (x(n), y_2(n)))

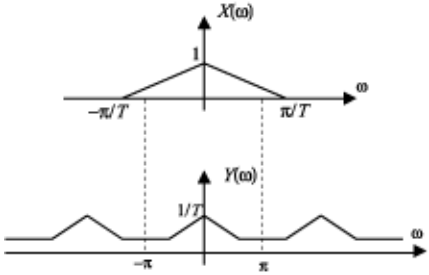
That is, the subscript is A1 not A.

- p. 164. Problem 12(a). The last word should be "*a*" rather than "*absent*".
- p. 178. below "we can rewrite (5.15) as: y = ... the last vector should have $a_{2,N}$ instead of $a_{2,2}$ for its second element.
- p. 193, equation (5.38), the closing brace should appear after x(m) rather than after x(n).
- p. 199, equation (5.44), the closing brace should appear after x(m) rather than after x(n).
- p. 222. Figure 6.8: in the definition of the *timeout* guard, instead of "and $u_1(t)$" it should read "and $u_2(t)$".
- p. 227. Line 12. The second "left spring" should read "right spring".
- p. 265, Fifth bullet from the top, 'A4*cos(440 x 2*pi*t) + phi4 = ... ' should read 'A4*cos(440 x 2*pi*t + phi4) = ... '.
- p. 295, Figure 8.6, the labels on the real and imaginary axes should be switched. The real axis is the horizontal one and the imaginary axis is the vertical one.
- p. 296, Figure 8.7, the labels on the real and imaginary axes should be switched. The real axis is the horizontal one and the imaginary axis is the vertical one.
- p. 303, in the second sum in the second last equation the lower limit should read, 'm = p-K' instead of 'm = K'.
- p. 309, second line from the bottom, 'S_2(S_1(x))' should read 'a S_2(S_1(x))'.
- p. 366, problem 11(c). The lower limit of the summation should read '*k* = 0' and the upper limit should read '*p*-1'.
- p. 412, problem 5(c). 'x(n) = sin(i* 2 *pi*f*n)' should read 'x(n) = sin (2*pi*f*n)'
- p. 430, figure 11.3 has one error. The scale should read x10^{-3} instead of 10^3.

- p. 439, figure 11.9 has two errors. The peaks of Y and W should be at $1/T$, not 1. Moreover, the bottom box should be labeled $Sinc_T$, and the last two boxes together should be $IdealInterpolator_T$. The corrected figure is:



- p. 441, figure 11.11 is wrong. It does not show aliasing distortion, and does not give a periodic DTFT. The correct figure is below:



- p. 444. Problem 6(b). Should be asking "Sketch and compare X_{20} and X_{40}."
- p. 460, Example 12.7, equation after (12.13). In the second

summation, the lower bound should be "m=0". Also, there should be an equal sign between 1/1-z^-1 and z/z-1.

- p. 617. Problem 17(f). The matrix multiplication shows a column vector multiplied by a matrix. The order is wrong. The column vector should appear after the matrix.
- p. 644. In the index entry for "power set," 592 should be bold, not 618.