## ERRATA SHEET FOR M. SAHINOGLU'S BOOK:

## TRUSTWORTHY COMPUTING

## ANALYTICAL AND QUANTITATIVE ENGINEERING EVALUATION

- Page: xviii, line 38; Replace "quantitative" with "numerical"
- Page: xviii, line 39; Replace "... Chapter 3, from..." with "... Chapter 3 from..."
- Page: xix, line 40; Remove quote marks before infrastructure
- Page: xix, line 41; Replace "Critical Systems:" with "Critical Systems;"
- Page: xxi, line 43; Insert "would" after "I"
- **Page: 7, line 5;** Replace "h(t) dt =  $\frac{1}{R(t)}$  dR(t)" with "h(t) dt =  $-\frac{1}{R(t)}$  dR(t)"
- Page: 9, Notes; Replace " $\theta$  = rate" with " $\theta$  = mean"
- Page: 14, (63); Replace "t\*" with "x\*"
- **Page: 18, line 12;** Replace "rate = uptime/(uptime + downtime" with "rate = downtime/(uptime + downtime)"
- Page: 19, line 1; Replace " $g_Q(q)$ " with " $G_Q(q)$ "
- **Page: 24, line 10;** Replace = " $\beta [-\ln(1-u_i)]^{1/\alpha}$ " with " $\alpha [-\ell n(1-u_i)]^{1/\beta}$ "
- **Page: 37, line 8;** Replace " $\hat{p} = 1 r/n$ " with " $\hat{p} = \frac{r}{n}$ "
- **Page: 37, 2. Type I;** Replace " $\hat{\mu} = \frac{1}{n} (NT_0)$ " with " $\hat{\mu} = \frac{1}{r} (nT_0)$ "
- Page: 37, 3. A; Replace " $\frac{2r\hat{\mu}}{\chi^{2}_{(\alpha/2),2n}} < \mu < \frac{2r\hat{\mu}}{\chi^{2}_{(1-\alpha/2),2n}}$ " with " $\frac{2r\hat{\mu}}{\chi^{2}_{(\alpha/2),2r}} < \mu < \frac{2r\hat{\mu}}{\chi^{2}_{(1-\alpha/2),2r}}$ "
- Page: 37, 4. Type II; Replace " $\hat{\mu} = \frac{1}{n} \operatorname{Nt}_r$ " with " $\hat{\mu} = \frac{1}{r} n t_r$ "
- **Page: 52, Example 1, 1., line 3;** Replace " $\mu(t) = \beta_0 (1 e^{\beta^{t_1}})$ " with " $\mu(t) = \beta_0 (1 e^{-\beta 1t})$ "
- **Page: 52, (215);** Replace " $\mu$ '(t) =  $\beta_0 \beta_1 (1 e^{-\beta_1 t})$ " with " $\mu$ '(t) =  $\beta_0 \beta_1 (1 e^{-\beta_1 t})$ "
- **Page: 53, Example 2, line 7;** Replace " $\mu(t) = \beta_0 (1 e^{-\beta_{1}t})$ " with " $\mu(t) = \beta_0 (1 e^{-\beta_1 t})$ "
- **Page: 53, Example 2, line 8;** Replace " $10(1-e^{-0.1(10)})$ " with " $100(1-e^{-0.1(10)})$ "
- **Page: 53, Example 2, line 10;** Replace " $\mu(t) = \beta_0 (1 e^{-\beta^t_1})$ " with " $\mu(t) = \beta_0 (1 e^{-\beta_1 t})$ "

- Page: 53, line 17; Replace " $\lambda_0 \exp[\theta \mu(t)]$ " with " $\lambda_0 \exp[-\theta \mu(t)]$ "
- **Page: 55, line 2;** Replace "3.33" with "0.476"
- Page: 55, line 6; Insert the word "(others)" between "Model" and "This"
- Page: 57, line 20; Insert "(Poisson Type)" after "Models"
- **Page: 58, line 27;** Replace "[97,102]" with "[97–102]"
- **Page: 60, line 9;** Replace " $(1-e^{-\beta}t)^{-1}$ " with " $(1-e^{-\beta t})^{-1}$ "
- Page: 72, 1.2(a); Replace all + with \*
- Page: 72, 1.2(b), line 4; Insert 95% between "find" and "approximate"
- **Page: 73, 1.6, line 2;** Replace "(when c = 1...)" with "(when d = 1...)"
- **Page: 73, 1.6, line 3;** Replace "when c=2" with "when d=2"
- **Page: 73, 1.6, line 11;** Insert "N" before "=  $v_0 = k$ "
- Page: 75, 1.10, line 2; Insert "Use 1.9 data" at the end of the sentence.
- Page: 76, 1.17, line 5; Omit the "(a)" as well as everything after the word "model".
- **Page: 76, 1.18;** Replace all + signs with \*
- Page: 76, 1.18, (a), line 3; Replace "pumps" with "disks".
- Page: 76, 1.18, (b); Replace "initial n = 10" with "initial r = 10"; replace "stop at nth failure" with "stop at r failure"; replace "total of N = 20" with "total of n = 20"
- **Page: 77;** Omit paragraphs 1.20, 1.21 and 1.22
- **Page: 77;** Change 1.23 to 1.20, change 1.24 to 1.21 and change 1.25 to 1.22
- Page: 81, Equation (6); Replace  $\frac{Y_{past}}{X_{past}}$  with  $\frac{Y_{past}}{t_{past}}$
- Page: 149, Security Meter Model Input Data, <u>"Change"</u> column; Replace 2, 2, 24, 2, 18, 76 with 0.2, 0.2, 0.24, 0.2, 0.18, 1.76
- Page: 151, 3.5.1, line 20; Replace "analysis are outline" with "analysis we outline"
- **Page: 151, 3.5.1, line 23;** Replace [61–63] with [61–63,65]
- Page: 152, (44); Replace  $\frac{\int_{s}^{t+s} u(x)dx}{n!} \text{ with } \frac{\left[\int_{s}^{t+s} u(x)dx\right]^{n}}{n!}$
- **Page: 152, 3.5.3;** Omit the first "25" and Replace "14, 32, 28, 25, 25, 19, 24, 25, 22, 24" with "14, 32, 28, 25, 19, 24, 25, 22, 24"
- Page: 153, 2, line 6; Replace "antipiracy" with "anti-theft"
- Page: 153, 2, line 10 & 11; Omit the first "25" from "14, 32, 28, 25, 25, 19..."
- **Page: 167, #65;** Replace "(Session 22:Risk), Lisbon, Portugal, August 2007" with "(Risk Assessment), Lisbon, Portugal, August 22-29, 2007"
- **Page; 168, line 3;** Replace "= 10/year" with " = 14/year"
- Page: 169, 3.6; Replace "Dependent" with "Nondisjoint"
- **Page: 169, 3.6, (a);** Replace " $P(V_2) = 0.25$ " with " $P(V_2) = 0.45$ "
- **Page: 169, 3.7, line 3;** Replace "3x3x3" with "3x3x2"
- **Page: 169, 3.8, line 3;** Replace "3x3x3" with "3x3x2"

- Page: 173, line 5; Replace "...intended service of for particular..." with "...intended service or particular..."
- Page: 182, 4.1.4, line 2; Remove the "3" from "weeks"
- **Page: 185, Table 4.1;** Add ",expense = \$15000" after "..for Table 4.2" in the title.
- **Page: 185, Table 4.1, item#1;** Add "when c = \$100, b = \$200, a = \$1200" after "=1.0"
- **Page: 185, Table 4.1, item#5;** Add "when c = \$100, b = \$200, a = \$1200" after "level"
- Page: 186, Table 4.2; Replace existing table with the red ink additions

TABLE 4.2 Single Stage Stopping Rules  $S(.) = X^*$  with Expense Budget = \$15,000

		c = \$100 b = \$200	c = \$100 b = \$200	c = \$100 b = \$1000		c = \$100 b = \$200	Expense> \$15,000
DR1 100 200 200	0 0.5 0.8 ( <u>107</u> ) 0.9 ( <u>121</u> )	S(4)=38 S(100)=94 S(169)=132 S(169)=132	S(2)=36 S(100)=94 S(168)=132 S(168)=1232	\$1284 \$2550	\$485 \$1750	\$1100 \$1100	\$28800
DR2 92 185 185	0 0.5 0.8 ( <u>74</u> ) 0.9 ( <u>83</u> )	S(3)=23 S(92)=52 S(154)=90 S(153)=90	S(2)=23 S(92)=52 S(153)=90 S(153)=90	\$1300 \$2550	\$500 \$1750	\$1100 \$1100	\$19600
DR3 50 100 100	0 0.5 0.8 ( <u>35</u> ) 0.9 ( <u>40</u> )	S(8)=5 S(76)=39 S(85)=43 S(85)=43	S(2)=2 S(74)=38 S(84)=43 S(84)=43	\$1375 \$1633	\$575 \$833	\$500 \$500	\$15400
DR4 100 200 200	0 0.5 0.8 ( <u>50</u> ) 0.9 ( <u>57</u> )	S(4)=19 S(101)=54 S(187)=62 S(171)=57	S(2)=13 S(101)=54 S(100)=54 S(171)=57	\$1875 \$1466.7	\$1075 \$666.7	\$900 \$300	\$20900
<u>DR5</u> 1094 2176 2176	0 0.5 0.8 ( <u>37)</u> 0.9 ( <u>41</u> )	S(2)=4 S(1094)=40 S(100)=38 S(2042)=42	S(2)=4 S(1094)=40 S(100)=38 S(2042)=42	\$27088 \$4625	\$26288 \$3825	\$200700 \$10500	\$117400

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- **Page: 186, line 4;** Replace "at least 50% of the total failures..." with "at least 50% of the total test cases..."
- **Page: 186, bottom line;** "\$202,300.00", should read "\$202,700.00"
- Page: 200 and 203 Appendix 4C and figure 4C.5: strategy 1 & 2; Strategy 1, replace "Total Covered 1=38" with "Total Covered = 38"; Strategy 2, replace "Total Covered 3= 45" with "Total Covered = 45"
- Page: 203, Strategy 1 Cost Analysis; Replace \$685000.00 with \$68500.00
- Page: 227, line 5; Insert "Volume 50, No.4" before "pp.92-97" for Ref. 30
- Page: 227, #47;, change "N. Turkkan" to "F.K. Turkman"

- Page: 229, Exer. 4.1; Replace "Internal Data" with "DR Data".
- Page: 229, Exer. 4.2, line 4; Replace "product is okay following" with "product is safe following"
- Page: 229, Exer. 4.3; Insert "& 4.2" after "Exercise 4.1", remove "DR8.txt", replace "DR9.txt" with "DR8.txt" and replace "Internal Data" with "DR Data"
- Page 229, Exer. 4.4; Remove the letter "(a)", replace "Internal Data" with "T Data" and add "Take 50% for minimal coverage" after "c = \$1."
- Page 229, Exer. 4.4; Remove the entire (b) paragraph
- Page 230, Exer. 4.5; Replace "a>, b< and c<" with "a<, b> and c>"
- Page: 230; Add "4.7 Verify (or generate) table 4.2 by using MESAT-I application in the CD-ROM. Cite any disagreements, show and reason why?"
- Page: 240; Add at the bottom of page after "...this table." "See configurations I, II, III, IV on page 241 and FIGURE 5.1"
- **Page: 241, line 2;** Add "Config. I-IV in Table 5.1"
- Page: 241, FIGURE 5.1; Change "parallel" to "Parallel" in (b) and (c).
- **Page: 244, line 13;** Replace "10,000" with "1000"
- Page: 245, line 2; Remove "default"
- **Page: 245, line 8;** Replace "Chapter 6" with "Exercises 5.1 & 5.2"
- Page: 245, line 9; Replace "default" with "static"
- Page: 248, graph; Replace "Multi Nose Graph" with "Multi Node Graph"
- Page 249, line 6 (5A.5); Replace " $\lambda^a \exp(x_T \lambda)$ " by " $\lambda^a \exp(-x_T \lambda)$ "
- **Page: 253, Exercises, 5.1, line 2;** Replace "n = 5000" with "n = 100,000" and remove the "(a)" after "E5.1"
- Page: 254, line 1; Insert "is" between "generator" and "0"
- Page: 256, Case 1: single; Replace "R\*" & "R\*\*" with "r\*" & "r\*"
- Page: 256, Case 1: single, E(r) = mean; Replace "0.892568", "0.852496", "0.905617" and "0.900613" with "0.890985", "0.758064", "0.879397" and "0.897920"
- Page: 256, Case 1: single; Insert a space, "Simulation Results:" and a space between "E(r) = mean" and "7-node, 0.9 (0.7999)"
- Page: 259, line 27; Insert "." after "[1]"
- Page 262, Figure 6.4 is incorrectly repeated for a second time later on page 262 as Figure 6.6, therefore should be replaced by the following correct one:

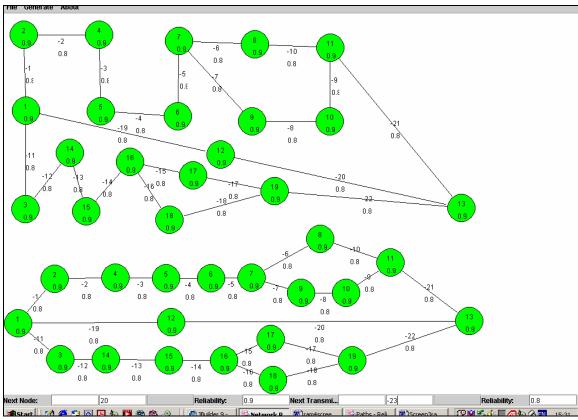


Figure 6.4 Topology for the Ding-Dong1 at the top section as reduced to the simpler network at the bottom section.

- Page: 278, 6.8.3; Insert "With Single Derated States" after "Simple Parallel-Series System"
- Page: 278, FIGURE 6.24; Replace "Simple parallel-series system with single derated state for s = 1, t = 4." With "Simple parallel-series system with single derated states."
- Page: 279, FIGURE 6.25; Replace "Simple parallel-series system with two derated states for s = 1, t = 4." With "Active parallel system with double derated states for 2 and 3."
- Page: 279, 6.8.4; Replace "Simple Parallel System" with "Active Parallel System With Double Derated States"
- Page: 279, 6.8.4, line 1; Replace "A simple parallel-series system" with "An active parallel system"
- Page: 279, 6.8.5; Replace "Combined System" with "Combined System With Multiple Derated States"
- **Page: 306, 6.6;** Replace "fully down (=0.2), and derated (= 0.1)" with "derated (= 0.2) and fully down (= 0.1)"
- **Page: 306, 6.7;** Replace "eight-node" with "8-node"
- **Page: 306, 6.9;** Replace "32-node" with "19-node" and "Figure E6.1" with "E5.1(b)"
- Page: 307, 6.11; line 2; Replace "Figures E6.1 and E6.10" with "E5.1(b)"

- **Page: 307, 6.11; line 5;** Add, "Perform 100,000 runs." at the end of the paragraph.
- **Page: 308, 6.12, line 2;** Replace "t = 9" with "t = 19" and "32-node" with "19-node"
- **Page: 308, 6.12, line 3;** Replace "Figure E6.1" with "Figure E5.1(b)"
- Page: 308, 6.12, line 5; Insert "by using the decoding button in CD-ROM" at the end
- **Page: 308, 6.14, line 1;** Replace "page 273" with "page 274"