

p. 14, 3rd bullet in inner product definition:

- $(a\langle v_2| + b\langle v_3|)|v_1\rangle = a\langle v_2|v_1\rangle + b\langle v_3|v_1\rangle$

should be

- $\langle v_1|(a|v_2\rangle + b|v_3\rangle) = a\langle v_1|v_2\rangle + b\langle v_1|v_3\rangle$

p. 22, 3 lines from bottom there is an extra ‘s’: “normalizations factor”  
should be “normalization factor”

p. 23, 3 lines from bottom:  $\mathbf{C}$  should be  $\mathbf{R}^3$

p. 24, Figure 2.6: The zero at the bottom of the picture should be  $|0\rangle$ .

p. 25, Section 2.5.3, paragraph 2, line 1: “equation is linear” should be  
“equation is linear and homogeneous”

p. 25, Section 2.5.3, paragraph 2, line 10: “nothing more . . . complex vector  
spaces” should be “nothing more . . . complex vector spaces equipped with inner  
product”

p. 168, Figure 8.1 caption: Replace 211 with 11 to obtain  $X = x|11^x \bmod 21 = 8$ .

p. 281, first full paragraph, sentence containing equation 11.9: Switch “ex-  
press” and “to.”

p. 312, “Lamont” should be “Lomont”

p. 360, “Lamont” should be “Lomont”

p. 45, Ex. 3.10a.: “the inner product of  $|v\rangle$  and  $|w\rangle$ ” should be “the inner product  $\langle w|v\rangle$  of  $|v\rangle$  and  $|w\rangle$ ”

p. 45, Ex. 3.10a.: the last term  $\bar{c}_2 a_2$  should be  $\bar{c}_n a_n$ .

p. 46 Exercise 3.14 a. The second term in the basis is missing a  $\frac{1}{\sqrt{2}}$ : the basis should be  $B = \{\frac{1}{\sqrt{2}}(|0\rangle + \mathbf{i}|1\rangle), \frac{1}{\sqrt{2}}(|0\rangle - i|1\rangle)\}$ .

p. 70. Ex. 4.22:  $1/2$  should be  $\frac{1}{\sqrt{2}}$ .