

Errata for
A Beginner's Course in Boundary Element Methods
Universal Publishers (2007)

Preface

Page ii, 1st and 4th lines of the footnote. The phrase “An integral equation methods” should be corrected to read “An integral equation method”. (11 Dec 2007)

Chapter 1

Page 38, 2nd line. “ $(x^{(m)}, y^{(m)}) = (0, (m - 1)\ell)$ ” should be corrected to read “ $(x^{(m)}, y^{(m)}) = ((m - 1)\ell, 0)$ ”. (This error reported by Bao-Ing Yun is purely a typographical one and does *not* affect the code on page 38.) (11 Dec 2007)

Page 38, 3rd line. “ $(x^{(m+2N_0)}, y^{(m+2N_0)}) = (1 - (m - 1)\ell, 0)$ ” should be corrected to read “ $(x^{(m+2N_0)}, y^{(m+2N_0)}) = (1 - (m - 1)\ell, 1)$ ”. (This error reported by Bao-Ing Yun is purely a typographical one and does *not* affect the code on page 38.) (11 Dec 2007)

Page 38, 4th line. “ $(x^{(m+3N_0)}, y^{(m+3N_0)}) = (1 - (m - 1)\ell, 0)$ ” should be corrected to read “ $(x^{(m+3N_0)}, y^{(m+3N_0)}) = (0, 1 - (m - 1)\ell)$ ”. (This error reported by Bao-Ing Yun is purely a typographical one and does *not* affect the code on page 38.) (11 Dec 2007)

Chapter 3

Page 84, 7th line. In the series definition for $J_0(x)$, $(m!)^m$ should be replaced by $(m!)^2$. (This error reported by Alessandro Vaccari is purely a typographical one and does not affect any other part of the book.) (4 July 2008)

Page 84, 8th line. The definition for $Y_0(x)$ should be corrected to read:

$$Y_0(x) = \frac{2}{\pi} \left(\ln\left(\frac{x}{2}\right) + \gamma \right) J_0(x) - \frac{2}{\pi} \sum_{m=1}^{\infty} \frac{(-1)^m x^{2m}}{4^m (m!)^2} \sum_{k=1}^m \frac{1}{k}.$$

(Note that the expression $\sum_{k=1}^m \frac{1}{k}$ is missing in the definition given in the book. This error is purely typographical and does not affect any other part of the book.) (22 May 2009)

Chapter 5

Page 160, 3rd line. The phrase “two-dimensional solution region” should be corrected to read “two-dimensional solution domain”. (11 Dec 2007)

Page 168, last line. In equation (5.22), “ $x^2 + y^2 \rightarrow 0$ ” should be replaced by “ $x^2 + y^2 \rightarrow \infty$ ”. (11 March 2009) (This error was reported by Joris Vankerschaver.)

Page 197, Problem 7. The phrase “circle” should be corrected to read “circular region”, and “ $x^2 + y^2 < a$ ” should be corrected to read “ $x^2 + y^2 < a^2$ ”. (11 Dec 2007)

Updated on 22 May 2009 by WT Ang