Typos in “Geometric Methods and Applications for Computer Science and Engineering, Second Edition”

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2. Page vxi, Paragraph “How to Use This Book for a Course.” Change “books” to “book.”

3. Page 57, line -2, change “homomorphisms” to “isomorphisms.”

4. Page 193, line -3, the equation for $Q_n(x)$ should be

$$Q_n(x) = \sqrt{\frac{2n+1}{2}} P_n(x).$$


6. Page 204, in Problem 6.4, second equation of the hint, the two determinants on the left hand side should be swapped.

7. Page 268, lines 12, 14, 16, change $U_2P$ to $PU_2$.

8. Page 274, line just above part (c), $u$ should be a unit vector.

9. Page 275, line just above Remark, change $\theta \neq k2\pi$ to $\theta \neq 0$.

10. Page 275, in Problem (f), in the formula for $\exp^{-1}(R)$, change $\pm \pi$ to $(2k + 1)\pi$, with $k \in \mathbb{Z}$.

11. Page 275, in Problem (f), change the last sentence to: Show that there is a unique skew-symmetric $B$ with corresponding $\theta$ satisfying $0 < \theta < \pi$ such that $e^B = R$. 

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12. Page 324, line 6, change $\varphi : \mathbb{R} \times \mathbb{R} \to \mathbb{R}$ to $\varphi : \mathbb{R}^2 \times \mathbb{R}^2 \to \mathbb{R}$.

13. Page 324, line 11, change “Chapter 11” to “Chapter 6.”

14. Page 349, line 4, change “of $f^*$” to “of $f^*_C$.”

15. Page 352, line 4, change $\langle f(u), u \rangle$ to $\langle f(u), v \rangle$.

16. Pages 354-355, in the proof of Theorem 12.5, all occurrences of “$f$” should be “$f^*_C$.”

17. Page 368, in Proposition 13.1, the last equation should be $n - \dim(\text{Ker} f) = m - \dim(\text{Ker} f^*)$.

18. Page 371, line 1, change “Schimdt” to “Schmidt.”

19. Page 373, in Definition 13.3, change “wih” to “with” and “$A$ symmetric” to “$S$ symmetric.”

20. Pages 376-378, in Theorem 13.4, the statement about the uniqueness of $h_1$ and $h_2$ is incorrect. This can be corrected by changing slightly the definition of a weakly orthogonal map, and requiring that $h_1, h_2$ and $g$ have the same rank as $f$.

21. Page 387, line 5, change “pécédentes” to “précédentes.”

22. Page 391, line 2, in the expression for $AA^+$, the subscript $n - r$ should be $m - r$.

23. Page 391, line -7 and -3, $n$ should be $m$.

24. Page 392, line 1, 2, 3, the subscript $n - r$ should be $m - r$.

25. Page 397, in the proof of Proposition 14.4, $p$ should be $n$, the subspace $V_{k+1}$ should be $U_{k+1}$, and $(v_1, \ldots, v_{k+1})$ should be $(u_1, \ldots, u_{k+1})$.

26. Page 422, line 3, in the third and fourth expression, $\Sigma_{r-1}c$ should be $\Sigma_r^{-1}c$.

27. Page 422, line -6, in the left expression, $R$ should be $R^\top$ and $S$ should be $S^\top$.

28. Page 483, paragraph before Definition 18.5, $t$ is a small real (or complex) number and it is the set of points of the form $a + tu$ that forms an interval $[r, s]$ in $A$.

29. Page 496, line 5, change “rank $m$” to “rank $k$.” Line 7, Change “Consequenly” to “Consequently.”

30. Page 514, next to last line, change $\theta = k2\pi$ to $\theta = 0$.

31. Page 515, line 1, change $\theta \neq k2\pi$ to $\theta \neq 0$.

32. Page 515, in the equation just above part (d), $E^A$ should be $e^A$. 
33. Page 517, line 1, change \( \theta = k2\pi \) to \( \theta = 0 \). Line 3, change \( \theta \neq k2\pi \) to \( \theta \neq 0 \).

34. Page 534, line 17, change “\( f'(c) \neq 0 \) for all \( c \in ]a, b[ \)” to “\( g'(t) \neq 0 \) for all \( t \in ]a, b[ \)”.

35. Page 589, in Example 20.1, the numerator of the expression for \( y \) should be \( 2bu \) instead of \( 2bv \).