Bibliography

1. J.W. Demmel, Applied Numerical Linear Algebra, SIAM, Philadelphia, 1997.
2. G.H. Golub, C.F. Van Loan, Matrix Computations, fourth ed.,The Johns Hopkins University Press, Baltimore, 2013.
3. Y. Saad, Numerical Methods for Large Eigenvalue Problems, Revised ed., SIAM, Philadelphia, 2011.
4. D.S. Watkins, The Matrix Eigenvalue Problem, GR and Krylov Subspace Methods, SIAM, Philadelphia, 2007.
5. G.W. Stewart, Matrix Algorithms, Volume II: Eigensystems, SIAM, Philadelphia, 2001.
6. Z. Bai, J. Demmel, J. Dongarra, A. Ruhe, H. van der Vorst (Eds.), Templates for the Solution of Algebraic Eigenvalue Problems: A Practical Guide, SIAM, Philadelphia, 2000.
7. N. Magnenat-Thalman, D. Thalmann, State of the Art in Computer Animation, Animation 2 (1989) 82–90.
8. G. Strang, Introduction to Linear Algebra, fourth ed., Wellesley-Cambridge Press, Wellesley, MA, 2009.
9. J.H. Wilkinson, The Algebraic Eigenvalue Problem, Oxford University Press, New York, 1965.
10. W.E. Boyce, R.C. DiPrima, Elementary Differential Equations, ninth ed., Wiley, Hoboken, NJ, 2009.
11. R.S. Varga, Matrix Iterative Analysis, Prentice-Hall, Englewood Cliffs, NJ, 1962.
12. J.P. Keener, The Perron-Frobenius theorem and the ranking of football teams, SIAM Rev. 35 (1) (1993) 80–93.
13. S. Brin, L. Page, The anatomy of a large-scale hypertextual web search engine, Comput. Netw. ISDN Syst. 30 (1998) 107–117.
14. T.H. Wei, The Algebraic Foundations of Ranking Theory, Cambridge University Press, University of Cambridge, 1952.
15. R. Horn, C. Johnson, Matrix Analysis, second ed., Cambridge University Press, New York, 2013.
16. N.J. Higham, Accuracy and Stability of Numerical Algorithms, second ed., SIAM, Philadelphia, 2002.
17. G.W. Stewart, Matrix Algorithms, Volume I: Basic Decompositions, SIAM, Philadelphia, 1998.
18. D. Goldberg, What every computer scientist should know about floating-point arithmetic, Comput. Surv. 23(1) (1991) 5–48.
19. B.N. Datta, Numerical Linear Algebra and Applications, second ed., SIAM, Philadelphia, 2010.
20. Mathworks, Create MEX-files, http://www.mathworks.com/help/matlab/create-mex-files.html.
21. G.A. Baker, Jr., P. Graves-Morris, Padé Approximants, Cambridge University Press, New York, 1996.
22. A.J. Laub, Computational Matrix Analysis, SIAM, Philadelphia, 2012.
23. D.S. Watkins, Fundamentals of Matrix Computations, third ed., Wiley, Hoboken, NJ, 2010.
24. A. Levitin, Introduction to the Design and Analysis of Algorithms, third ed., Pearson, Upper Saddle River, NJ, 2012.
25. G.H. Golub, C. Reinsch, Singular value decomposition and least squares solutions, Numer. Math. 14 (1970) 403–420.
26. L. Trefethen, David Bau, III, Numerical Linear Algebra, SIAM, Philadelphia, 1997.
27. G. Allaire, S.M. Kaber, Numerical Linear Algebra (Texts in Applied Mathematics), Springer, New York, 2007.
28. W.W. Hager, Condition estimators, SIAM J. Sci. Stat. Comput. 5 (2) (1984) 311–316.
29. G. Rodrigue, R. Varga, Convergence rate estimates for iterative solutions to the biharmonic equation, J. Comput. Appl. Math. 24 (1988) 129–146.
30. J.R. Winkler, Condition numbers of a nearly singular simple root of a polynomial, Appl. Numer. Math. 38 (3) (2001) 275–285.
31. L.V. Foster, Gaussian elimination with partial pivoting can fail in practice, SIAM J. Matrix Anal. Appl. 15 (1994) 1354–1362.
32. N.J. Higham, Efficient algorithms for computing the condition number of a tridiagonal matrix, SIAM J. Sci. Stat. Comput. 7 (1986) 150–165.
33. A. Gilat, V. Subramaniam, Numerical Methods for Engineers and Scientists: An Introduction with Applications Using MATLAB, second ed., Wiley, Hoboken, NJ, 2011.
34. R.H. Bartels, J.C. Beatty, B.A. Barsky, An Introduction to Splines for Use in Computer Graphics and Geometric Modelling, Morgan Kaufmann, San Francisco, 1995.
35. E.W. Weisstein, Cubic spline, http://mathworld.wolfram.com/CubicSpline.html.
36. T.A. Grandine, The extensive use of splines at Boeing, SIAM News 38 (4) (2005) 1–3.
37. A.J. Jerri, The Gibbs Phenomenon in Fourier Analysis, Splines and Wavelet Approximations, Springer, New York, 1998.
38. G.T. Gilbert, Positive definite matrices and Sylvester's criterion, Am. Math. Mon. 98 (1) (1991) 44–46.
39. R.s. Ran, T.z. Huang, X.p. Liu, T.x. Gu, An inversion algorithm for general tridiagonal matrix, Appl. Math. Mech. Engl. Ed. 30 (2009) 247–253.
40. J.W. Lewis, Inversion of tridiagonal matrices, Numer. Math. 38 (1982) 333–345.
41. Q. Al-Hassan, An algorithm for computing inverses of tridiagonal matrices with applications, Soochow J. Math. 31 (3) (2005) 449–466.
42. E. Kiliç, Explicit formula for the inverse of a tridiagonal matrix by backward continued fractions, Appl. Math. Comput. 197 (2008) 345–357.
43. M. El-Mikkawy, A. Karawia, Inversion of general tridiagonal matrices, Appl. Math. Lett. 19 (8) (2006) 712–720.
44. MIT course 18.335J, Difference in results between the classical and modified Gram-Schmidt methods, http://ocw.mit.edu/courses/mathematics/.

45. L. Giraud, J. Langou, M. Rozloznik, The loss of orthogonality in the Gram-Schmidt orthogonalization process, Comput. Math. Appl. 50 (2005) 1069–1075.
46. C.B. Moler, Numerical Computing with MATLAB, SIAM, Philadelphia, 2004.
47. I. Ipsen, Numerical Matrix Analysis—Linear Systems and Least Squares, SIAM, Philadelphia, 2009.
48. N.J. Higham, Computing the polar decomposition with applications, SIAM J. Sci. Stat. Comput. 7 (1986) 1160–1174.
49. G.H. Golub, Numerical methods for solving linear least squares problems, Numer. Math. 7 (1965) 206–216.
50. K.A. Gallivan, S. Thirumalai, P. Van Dooren, V. Vermaut, High performance algorithms for Toeplitz and block Toeplitz matrices, Linear Algebra Appl. 241 (1996) 343–388.
51. A. Björck, Numerical Methods for Least Squares Problems, SIAM, Philadelphia, 1996.
52. A. Björck, Solving linear least-squares by Gram-Schmidt orthogonalization, BIT 7 (1967) 1–21.
53. D.G. Zill, W.S. Wright, Advanced Engineering Mathematics, fifth ed., Jones & Bartlett Learning, Burlington, MA, 2014.
54. J.G.F. Francis, The QR transformation, part I. Comput. J. 4 (1961) 265–272.
55. J.G.F. Francis, The QR transformation, part II, Comput. J. 4 (1961) 332–345.
56. R.S. Martin, G. Peters, J.H. Wilkinson, The QR algorithm for real Hessenberg matrices, Numer. Math. 14 (1970) 219–231.
57. D. Day, How the QR algorithm fails to converge and how to fix it, Technical report 96–0913J, Sandia National Laboratory, Albuquerque, NM, April 1996.
58. J.J.M. Cuppen, A divide and conquer method for the symmetric tridiagonal eigenproblem, Numer. Math. 36 (1981) 177–195.
59. M. Gu, S.C. Eisenstat, A divide-and-conquer algorithm for the symmetric tridiagonal eigenproblem, SIAM J. Matrix Anal. Appl. 16 (1995) 172–191.
60. M. Gu, S.C. Eisenstat, A stable algorithm for the rank-1 modification of the symmetric eigenproblem, Computer Science Department report YALEU/DCS/RR-916, Yale University, 1992.
61. B.E. Parlett, The Symmetric Eigenvalue Problem, SIAM, Philadelphia, 1997.
62. University of Tennessee, Berkeley University of California, University of Colorado Denver, and NAG Ltd., LAPACK documentation, http://www.netlib.org/lapack/.
63. W.L. Briggs, V.E. Henson, S.F. McCormick, A Multigrid Tutorial, second ed., SIAM, Philadelphia, 2000.
64. Y. Saad, Iterative Methods for Sparse Linear Systems, second ed., SIAM, Philadelphia, 2003.
65. Z. Zlatev, Computational Methods for General Sparse Matrices, Springer, New York, 1991.
66. I.S. Duff, A.M. Erisman, J.K. Reid, Direct Methods for Sparse Matrices, Oxford University Press, New York, 1989.
67. N. Munksgaard, Solving sparse symmetric sets of linear equations by preconditioned conjugate gradients, ACM Trans. Math. Softw. 6 (1980) 206–219.
68. K. Chen, Matrix Preconditioning Techniques and Applications, Cambridge University Press, Cambridge, 2005.
69. H.A. van der Vorst, Iterative Krylov Methods for Large Linear Systems, Cambridge University Press, New York, 2009.
70. G. Meurant, Z. Strakos, The Lanczos and conjugate gradient algorithms in finite precision arithmetic, Acta Numer. 15 (2006) 471-542.
71. Z. Strakos, On the real convergence rate of the conjugate gradient method, Linear Algebra Appl. 154–156 (1991) 535–549.
72. G.L.G. Sleijpen, H.A. van der Votst, J. Modersitzki, Differences in the effects of rounding errors in Krylov solvers for symmetric indefinite linear systems, SIAM J. Matrix Anal. Appl. 22 (3) (2000) 726–751.
73. A. Greenbaum, Iterative Methods for Solving Linear Systems, SIAM, Philadelphia, 1997.
74. A.P.S. Selvadurai, Partial Differential Equations in Mechanics 2: The Biharmonic Equation, Poisson's Equation, Springer, Berlin, 2000.
75. M. Arad, A. Yakhot, G. Ben-Dor, Highly accurate numerical solution of a biharmonic equation, Num. Meth. Partial Diff. Equations 13 (1997) 375–391.
76. D.S. Scott, How to make the Lanczos algorithm converge slowly, Math. Comp. 33 (1979) 239–247.
77. S. Kaniel, Estimates for some computational techniques in linear algebra, Math. Comp. 20 (1966) 369–378.
78. C.C. Paige, The computation of eigenvalues and eigenvectors of very large sparse matrices (Ph.D. thesis), University of London, 1971.
79. C.C. Paige, Computational variants of the Lanczos method for the eigenproblem, J. Inst. Math. Appl. 10 (1972) 373–381.
80. C.C. Paige, Error analysis of the Lanczos algorithm for tridiagonalizing a symmetric matrix, J. Inst. Math. Appl. 18 (1976) 341–349.
81. C.C. Paige, Accuracy and effectiveness of the Lanczos algorithm for the symmetric eigenproblem, Linear Algebra Appl. 34 (1980) 235–258.
82. J. Demmel, K. Veselic, Jacobi's method is more accurate than QR, SIAM J. Matrix Anal. Appl. 13 (1992) 1204–1245.
83. G.W. Stewart, Perturbation theory for the singular value decomposition, in: R.J. Vaccaro (Ed.), SVD and Signal Processing, II: Algorithms, Analysis and Applications, Elsevier, Amsterdam, 1990, pp. 99–109.
84. Z. Drmač, K. Veselic, New fast and accurate Jacobi SVD algorithm: I, SIAM J. Matrix Anal. Appl. 29 (2008) 1322–1342.
85. Z. Drmač, K. Veselic, New fast and accurate Jacobi SVD algorithm: II, SIAM J. Matrix Anal. Appl. 29 (2008) 1343–1362.
86. G.H. Golub, W. Kahan, Calculating the singular values and pseudo-inverse of a matrix, SIAM J. Numer. Anal. 2 (1965) 205–224.
87. J. Demmel, W. Kahan, Accurate singular values of bidiagonal matrices, SIAM J. Sci. Stat. Comput. 11 (1990) 873–912.
88. A. Gil, J. Segura, N.M. Temme, Numerical Methods for Special Functions, SIAM, Philadelphia, 2007.
89. Haag, Michael, Justin Romberg, Stephen Kruzick, Dan Calderon, and Catherine Elder "Cauchy-Schwarz Inequality." OpenStax-CNX. 2013. http://cnx.org/content/m10757/2.8/.
90. T.A. Davis, Y. Hu, ACM transactions on mathematical software, The University of Florida sparse matrix collection, 38 (2011) 1:1–1:25.
91. F.L. Bauer, C.T. Fike, Norms and exclusion theorems, Numer. Math. (1960) 137–141.