

Notes on GMRES Algorithm Organization

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Technical Report TR-05-05

Department of Computer Sciences, University of Texas at Austin, March 05, 2005

Abstract

The Generalized Minimum Residual (GMRES) iterative method and variations of it are frequently used for solving systems of linear equations of the form $Ax = b$, where A is a large sparse nonsingular nonsymmetric matrix. We discuss ways to reorganize the algorithm to improve its efficiency. See

www.cs.utexas.edu/users/kincaid/GMRES/

Key words: Generalized Minimum Residual (GMRES) iterative method, Preconditioned GMRES(m) Algorithm, solving large sparse systems of linear equations, GMRES algorithm reorganization and Matlab code,

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