

# **Parallel SVD computation and information retrieval applications**

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In this work an algorithm for the sparse SVD problem is presented and its implementation to distributed computer system is shown. The implementation is optimized for latent semantic indexing (LSI) so that only a few largest singular numbers and associated singular vectors are computed. Algorithm presented here is based on the Lancosz method and its modified for fast convergence with sufficient accuracy. We will present examples of multimedia information retrieval applications (LSI).