
Algorithm 1 XXX

Input: *Matrix* X , W
Output: *Matrix* D'
for each x_i in X **do**

 Calc $\|x_i\|_2^2$ by using

end for
for each w_i in W **do**

 Calc $\|w_i\|_2^2$ by using CPEs

end for

An all-one matrix($1 \times n$) is multiplied by the result of Step 1-2 by SGEMM for Xsq

An all-one matrix($1 \times n$) is multiplied by the result of Step 3-4 by SGEMM for Wsq

Calc $-2X^T M$ by SGEMM

Calc D' by SAXPY
