

## Project: Review two papers

### Due Friday 3 May, 2013

I have made copies of these longer papers; you will choose ONE of these:

- Axler (1995), *Down with determinants!*
- Golub and Kahan (1965), *Calculating the singular values and pseudo-inverse of a matrix*
- Moler and van Loan (2003), *Nineteen dubious ways to compute the exponential of a matrix, twenty-five years later*
- Page, Brin, et al. (1999), *The PageRank citation ranking: Bringing order to the web*

I have also made copies of these shorter papers; you will choose ONE of these:

- Householder (1958), *Unitary triangularization of a nonsymmetric matrix*
- Townsend and Trefethen (2013), *Gaussian elimination as an iterative algorithm*
- Wilkerson (1960), *Householder's method for the solution of the algebraic eigenproblem*

Thus you have two papers to review in one week. This will require some work, and you are advised to get going now!

Each review should be one page. That is the length of my sample review of Turing (1948), *Rounding-off errors in matrix processes*. This sample is a good guide for some of what you might put in your reviews. I have made it easy for you to format your review by posting a blank review in L<sup>A</sup>T<sub>E</sub>X format:

<http://www.dms.uaf.edu/~bueler/blankreview.tex>

This “blank” review is shown on the reverse side. You will replace all CAPITALIZED TEXT with real content.

To start:

- (1) Download `blankreview.tex` and open in an editor, and make sure you can run L<sup>A</sup>T<sub>E</sub>X on it, or open a new word processor document and set up the same format.

Now, for each of your two papers:

- (2) Use Google Scholar or other source to get the complete (and correct) citation, and fill it in.
- (3) Go through the paper fairly quickly, looking especially for what to put in the “Relation to topics in Trefethen & Bau” part of the review.
- (4) Read the paper more carefully, keeping notes.
- (5) *strong suggestion*: Find another student in the class and talk through what is in the paper.
- (6) Write the rest of the review.