

6.780 Semiconductor Manufacturing Spring 2003

Critical Paper Review

Issued: Friday, March 21, 2003 Due: Wednesday, April 16, 2003

The purpose of this assignment is for you to demonstrate an ability to read, with a critical eye, the current technical literature in semiconductor manufacturing. You will select a paper of your choice from a recent journal (e.g. *IEEE Trans. on Semiconductor Manufacturing*) that makes use of statistical analysis or modeling methods. You can access the *Transactions* and several other related journals through the MIT libraries. From libraries.mit.edu, access Vera, and then search for "semiconductor manufacturing". If you would like to browse a set of hard copies, recent volumes of the *Trans. on Semiconductor Manufacturing* will be available in my office.

You will summarize the goals and statistical/analytical methods used in the paper you are reviewing. You should also analyze the effectiveness of these methods, and make suggestions as to improvements or next steps in these methods or research that might be appropriate.

Your critical review should be approximately 8 to 12 pages in length, and you should feel free to include an appropriate subset of figures from the paper you are reviewing, with citation of course. The submission of your critical review will be made electronically.

I will assemble the collection of these critical reviews and make them available to the entire class; thus an important part of the review is to convince your audience of the valuable ideas or aspects of the paper you are reviewing, as well as to provide any insight you develop into the limitations or extensions of these methods.

Deadlines:

- Friday, April 4: email with a citation for the paper you are reviewing.
- Wednesday, April 16: submit your critical review write up.