

The purpose of this assignment is to get practice in library searches and in reading, understanding, analyzing, explaining, and critiquing a journal paper. It is likely that as a professional you will a) need to study, learn, comprehend, and apply material in a journal paper, and b) be called upon to review journal papers or conference papers for IEEE and other professional societies, so this is a useful skill to develop.

You are to find a recent journal paper whose subject is key to your term project. If you like, you can ask your instructor to approve the paper you've chosen. Typically, overview papers or papers that provide a qualitative synopsis are not acceptable. Preferably, you should find a paper that goes into the details of analytical methods (applied mathematics). Some typical sources for papers are (also - many links are given at end of EE5220 web page):

- IEEE Transactions on Power Systems, Power Delivery, etc.
- IEEE Power & Energy Magazine
- Cigre
- Elsevier
- Proceedings of IEE (Part B)
- Electric Power Research Journal
- Electric Machines and Power Systems Research Journal

You are to write a technical analysis and interpretation of the paper (not an outline!). *An analysis is an examination, evaluation, and interpretation of the paper. Is what the author doing correct? Has it been done before? Is it presented clearly? Is it worth writing about? Is the method new, an improvement on existing methods, or does it replicate something already done?* Go through the mathematical development of the paper, follow and understand the derivations, and explain how it works. To answer these questions, you may have to educate yourself on the topic of the paper. That may require reading other papers on the subject (given as references in the paper you're reviewing) and finding background material in books.

Deadlines:

End of Week 11: complete the technical analysis of your journal paper. (Internal milestone for your team, no formal submittal. You may contact your professor to discuss while your work is in progress.)

End of Week 12: Submit .pdf of paper and your rough draft of review/analysis notes. Also make a ppt summary (about 4 pages) with embedded audio for each slide. These slides can later be used in your final presentation. You are also perfecting your skills in embedded audio for self-narrated presentations (which may be required in the final presentation).